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ABSTRACT

GRADES OR AGES: Grades 1-12. SUBJECT MATTER: Art. ORGANIZATION AND PHYSICAL APPEARANCE: The presentation gives broad outlines and suggestions on how to teach a variety of art forms. The pages are lithographed in loose-leaf form and are bound in a plastic cover. OBJECTIVES AND ACTIVITIES: As a guide it aims at being a starting point from which a teacher, operating at any grade level, can adjust to a changing curriculum. INSTRUCTIONAL MATERIALS: Materials are listed for each art medium taught and for each level of activity. STUDENT ASSESSMENT: No provision is made. (JB)

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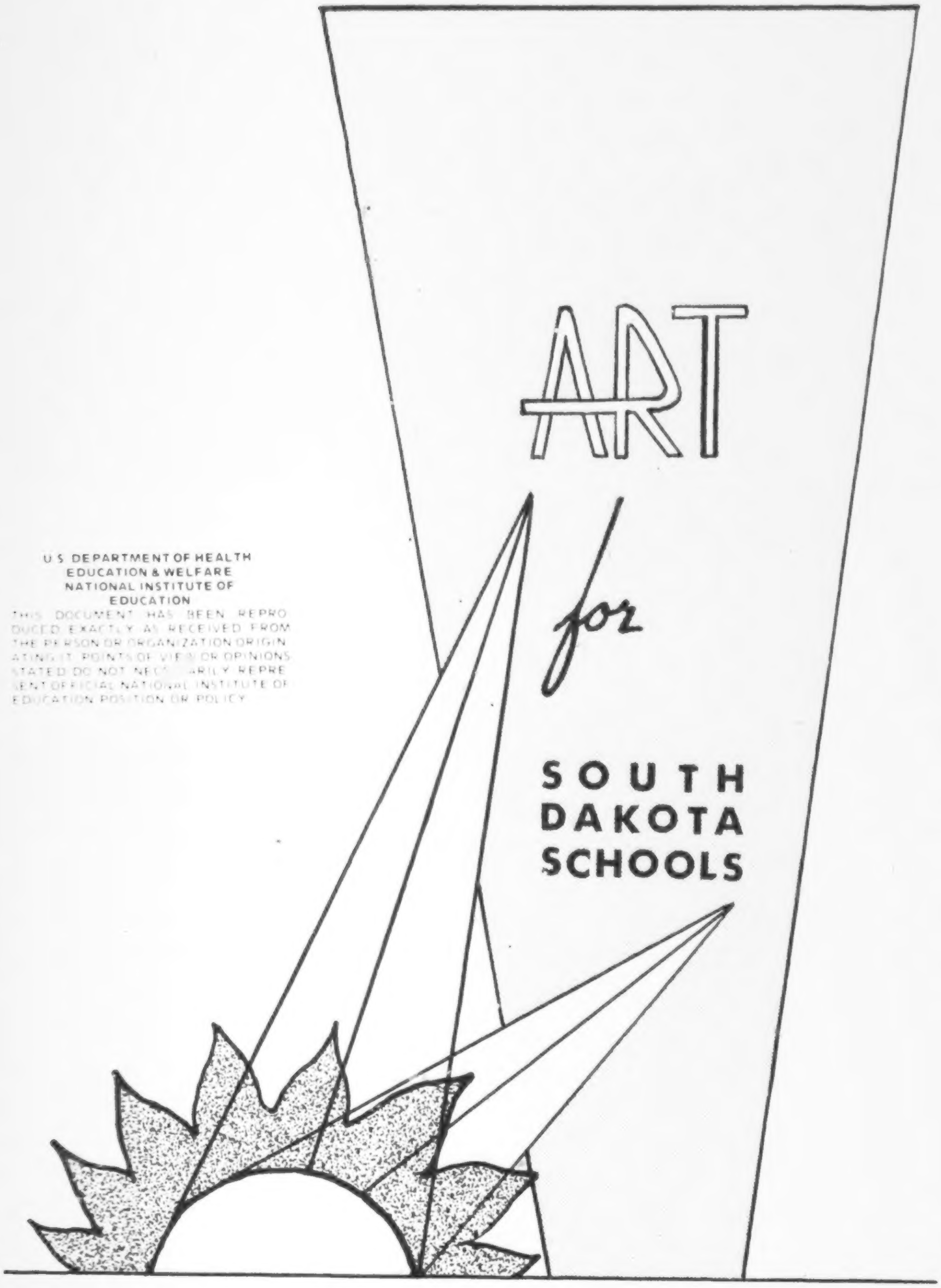

ART for SOUTH DAKOTA SCHOOLS

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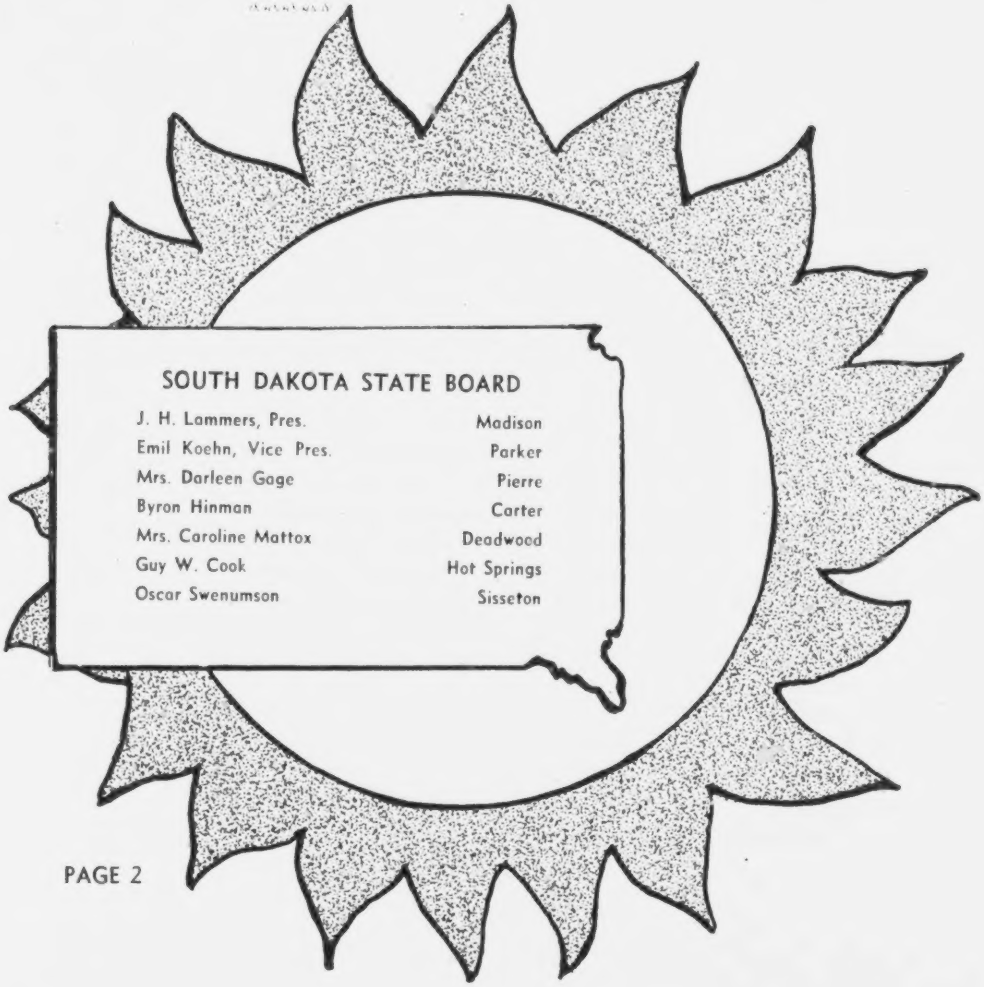

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As Director of Curriculum it has been most interesting to watch the development of this Art Guide for teachers of South Dakota.

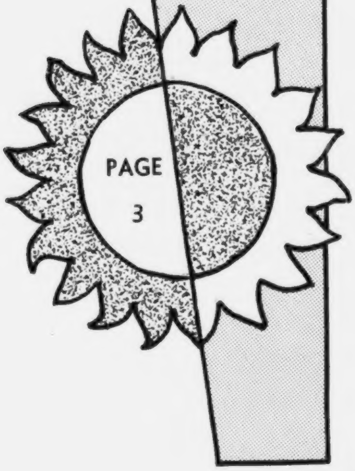
A great deal of Art "know-how" has gone into this guide. The members of the committee are dedicated people who have given many hours beyond the committee sessions to give South Dakota the best of their knowledge.

It is the wish of the Department of Public Instruction that each teacher has a copy of the guide. It is hoped that each school child within the state may benefit from the Art instruction made available to them through the teachers of the state.

Olive S. Berg

Director of Curriculum K-12
Department of Public Instruction

Director of Elementary Education
State of South Dakota



Message from the Superintendent...

Considering the many contributions to elementary and secondary education which were made by the late M. F. Coddington, we consider it most appropriate that this curriculum guide be dedicated to his memory.

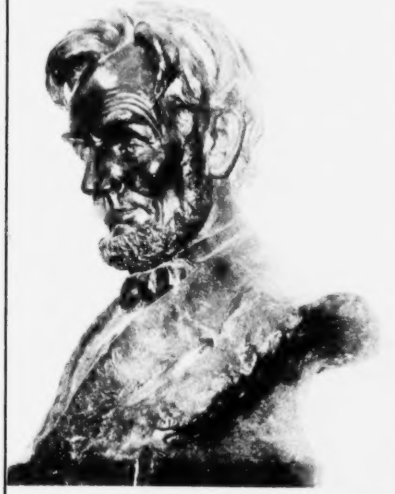
He devoted his entire adult life to the cause of education in South Dakota. He asked no favors, he never compromised on principles, and he refused to settle for anything but the best.

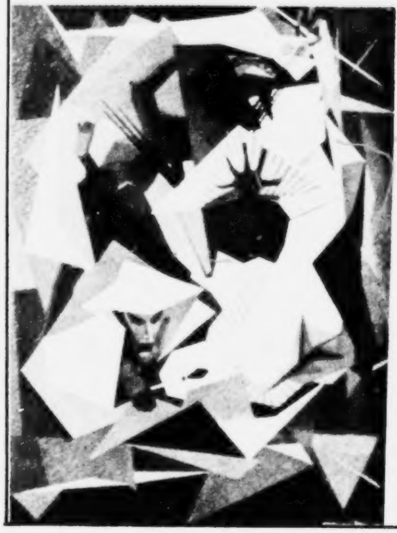
After much success as a teacher and school administrator, his dedication and devotion to good education was recognized by Governor Foss who selected him to serve as Superintendent of Public Instruction and fill the vacancy caused by the death of Harold S. Freeman. He not only completed that term but was elected to five additional terms. Even though he was approaching retirement age, Mr. Coddington never lost his interest in education and continued to be concerned with the affairs of his office until the time of his final illness.

May this curriculum guide be of much value to the Art teachers of South Dakota and may the elementary and secondary students of this state benefit greatly from the energy, creativity, and many hours of hard work which were so willingly given by the members of the curriculum committee. May the memory of the devotion and integrity of the late M. F. Coddington serve as an inspiration to those using this guide.

June 1967

F. R. Wanek
Acting State Superintendent





foreword

The artists of the state have left us a heritage of the past and the present. We as citizens can enjoy, appreciate and help preserve their contributions for future generations.

Art education in South Dakota can prepare the young for this responsibility. Art education can foster, and prepare the young and old alike to become productive contributors to our cultural development. As teachers and citizens we can go forward with confidence that we can achieve our goals statewide.

We would like to acknowledge the contributing artists on the preceding page

Top left	Robert Aldern, S.D.S.U.	Artist in Residence
Top right	Gutzon Borglum	Mount Rushmore Memorial
Middle left	Gilbert Risvold, S.D.S.U.	Lincoln Bust
Middle right	Korczak Ziolkowski	Chief Crazy Horse
Middle right	Milton Kudlacek, Art Dept., Dakota Wesleyan,	Painter
Bottom left	Oscar Howe, U.S.D.	Indian Artist in Residence
Bottom right	Harvey Dunn, S.D.S.U.	Painter and Illustrator
Page 49	Palmer Eide, Art Dept., Augustana	Liturgical Art

Many more examples perhaps should have been included but space would not permit.

To all who contributed pictures, work, suggestions, art work we express our sincere thanks. A thank you to the Robert Knopf family for use of their daughter's picture on page 8.

Special recognition must be given to Mrs. Olive Berg whose untiring efforts made this book possible. Her service to the State of South Dakota as Director of Curriculum will not be forgotten. Her interest and concern for the children of the state to insure they receive the best our state had to offer in all fields of education including art culminated with this guide. We the Art Committee hope this book justifies her trust in us.

TABLE OF CONTENTS

Superintendent's Message page 4
Foreword page 5
Art is Exciting page 9
Goals page 10-11
The Teacher page 12
The Child page 13
The Parents page 14
The Administrator page 15
Introduction to the Guide page 16
Spiral of Learning page 17-19
Fundamentals . . . Lines page 20
Fundamentals . . . Forms page 21
Fundamentals . . . Color page 22-23
Fundamentals . . . Space page 24
Fundamentals . . . Texture page 25
Fundamentals . . . Principles page 26-27
Drawing page 28
Painting page 29
Sculpture page 30
Printmaking page 31
Paper Sculpture page 32
Papier Mache page 33
Collage page 34
Mosaic page 35
Stabiles-Mobiles page 36
Metalry page 37
Jewelry page 38
Lettering page 39
Puppetry page 40
Stitchery page 41
Weaving page 42
Design page 43

Architectural Design page 44
Commercial Art Design page 45
Appreciation page 46-49
Evaluation — Grading page 50-51
Correlation — Copywork page 52
The Art Room page 53
Room Management page 54
Bulletin Boards page 55-56
Use of Newer Media page 57
Recipes page 59-62
Periodicals — Paperbacks page 63
Appreciation — Bibliography page 64
Films-Strips — Bibliography page 65
Art Material — Bibliography page 66
Publishers — Bibliography page 67
Glossary Art Terms page 68-71

Art is Exciting!

In art a child . . . SELECTS, EXPERIMENTS, ARRANGES, DISCOVERS, And SOLVES PROBLEMS.

He works with . . . PAINTS, PAPER, CLAY, WOOD, GLUE and many other media and tools.

He creates . . . . . PAINTINGS, CERAMICS, COLLAGES, PUPPETS and countless things . . .

But. . . . . . . More important than the "things" he creates is the development of his personality. What the material does to the child is of much greater significance . . . than what the child does with the material.

Art enriches the child's life through the development of heightened sensitivity toward his environment.

As he becomes more perceptive the child is challenged by the many beauties and wonders of South Dakota . . . of America . . . of the world and all its people . . . FRESH, NEW, AND BEAUTIFUL.

"Curiosity should be carefully cherished in children: it is but an appetite after knowledge." *John Locke*

Goals...

Art has been an integral part of human experience since the beginning of time.

IT IS IMPORTANT THAT EVERY CHILD IN SOUTH DAKOTA HAVE EDUCATION IN ART...

Because... it makes his life more rewarding as it quickens and deepens the quality of seeing, touching, hearing, selecting, and arranging.

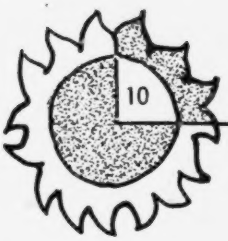
it develops skills and personal satisfaction in quality craftsmanship.

it encourages discrimination and good tastes as he learns about design and its interrelation to all of life.

it contributes to democratic living in a world so concerned with materialism and mechanization. Art is a humanizing factor which recognizes the unique personality of every child.

it is a universal way to communicate, a fulfillment of his never-ending need to express himself. It is his dreams, ideas, and contemplations in his visual language.

it makes him receptive to beauty, alert to the wonders of South Dakota, its hills, prairies, rivers, farmland, and people. It helps him to appreciate his cultural heritage and makes him sensitive to the pulse of the world.



"The general end of Art is the good of man." *Aristotle 4th Century*

Goals...

It is not the purpose of art education to train artists. Teaching art activities in all grades should help the creative, social, emotional, physical and aesthetic growth . . . . .

It will contribute to his total growth...

CREATIVE GROWTH is seen in the originality of ideas . . .

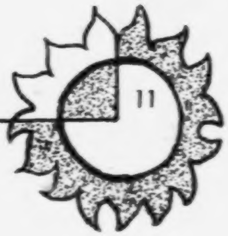
SOCIAL GROWTH . . . is the child's increasing ability to work cooperatively in a group and to sense the needs and the feelings of others. He learns give-and-take sharing.

EMOTIONAL GROWTH is the child's ability to identify himself with his own work in his expression of personal feeling or experience.

PHYSICAL GROWTH is motor control and ability to coordinate use of mind, eye, and hand.

AESTHETIC GROWTH is the increasing sensitivity to the organization of ideas and feelings by the use of material, form, color, and texture.

The space or galactic age will find art playing a more significant role in the total curriculum. Our concern needs to develop the whole child with a balanced personality and to develop productive citizens who can take their rightful places in the future society. When art is properly emphasized and given its rightful place of importance in educational structure, then enriched creative responses result.



"Imagination is more valuable than knowledge." *Albert Einstein*

The Teacher...

As a teacher you cannot assume a passive attitude toward Art Education.

You must know the nature of art and its value in contemporary education.

You must know the child — his uniqueness, his growth levels, his modes of expression, his interests, and his potentialities.

You must identify yourself with the needs and aspirations of every child.

You must know the most effective methods of teaching: to provide rich challenging experiences which will help pupils see, appreciate, understand, and apply knowledge.

to encourage experimentation in two and three dimensional activities.

to learn the possibilities and limitations of media, tools, and facilities.

to stimulate, through planning, discussing, and evaluating.

to provide a climate for creativity in an organized aesthetically pleasant atmosphere.

You must be professional . . .

by improving your proficiency through experimentation, workshop participation, study, and travel.

by active participation in professional organizations.

by cultivation of a well-balanced personality coupled with good taste in dress and manner. You must be an inspiration to your pupils as you make them realize the personal satisfaction of LIVING WITH ART.

"Art teachers should not be satisfied until the quality of Art Education in South Dakota is as good as the best anywhere." *Alma Schwarz*

The Child...

Remember...Each child is an individual with his own unique personality and he is not a small adult. Art Education is a sequential developing process. His art work reflects development in perception, skill and maturity. Education in art is for all children.

CHILDREN OF 5 AND 6 have a high energy level. They like to imitate, sing, dance, and play. They like imaginative games and manipulative activity. Successive stages in manipulating occur as the child enjoys color and movement, and discovers lines and shapes at random. "Schemata" for human forms appear.

CHILDREN OF 7 AND 8 are exuberant, imaginative, inquisitive, and confident as manipulative skill increases. They respond to real and vicarious experiences. The number of objects and details increases as the child grows in familiarity with his environment. Sky lines, base lines, and deviations as X-ray, time-space, fold-over, and multiple view points are seen. They portray what they know and believe as they manipulate large tools and materials. They relate experiences to self, family, home, and friends.

CHILDREN OF 9, 10, AND 11 are gregarious, loyal, expressive, and subjective. Manipulative skill increases and becomes more realistic as they identify with children of other times and places. Art becomes an integrating force with social studies, language arts, and other areas of the curriculum.

THE PRE-ADOLESCENT is self-conscious, critical, changeable, dramatic, realistic, and at times rebellious and uncooperative. He explores complex processes as his interest shifts from process to product. Group opinion is valued as boy-girl interests grow.

THE ADOLESCENT child is sensitive, idealistic, reflective, and inventive. He pursues advanced art techniques and processes. Awareness to other arts, science, and industry grows. He is dedicated to worthy causes. He is interested in the place of art in history and begins to think of art as a vocation or leisure-time activity. Spiritual and moral values of art are strong at this time.

"Children cannot create out of a vacuum. They must have something to say and be fired to say it." *Natalie R. Cole*

The Parents...

PARENTS as well as the teachers should have a common understanding of the importance of Art in education.

As a parent you should . . .

. . . **ACCEPT** your child's art as an honest statement of his emotional and intellectual reaction to his experiences.

. . . **REGARD** your child's art as unique and not to be compared to the work of other children.

. . . **REMEMBER** your child's art is relative to his maturation level.

. . . **ACKNOWLEDGE** art work brought home with a sincere interest. "Tell me about it." not "What is it?"

. . . **ENCOURAGE** art work at home by providing good materials and a place to work.

. . . **DISPLAY** your child's work for a short time and then dispose of it by cooperative effort.

. . . **PRAISE** good work habits and encourage responsibility in the care of tools, materials, and work-space.

. . . **DISCOURAGE** use of color books, patterns, paint-by-number art, and other stereotypes as detrimental to creativity.

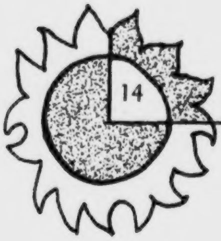
. . . **ENCOURAGE** the development of good taste by supplying an aesthetic home environment.

. . . **ENJOY** creative experiences with your child.

. . . **TAKE** time to enjoy beauty with your child.

. . . **FAMILIARIZE** yourself with art. Visit art classes and exhibits. Read about art and its place in education.

**REMEMBER: A GENUINE INTEREST IN HIS ART
WILL HELP YOU KNOW YOUR CHILD.**



"One of the most important factors in stimulating expression is adult interest, particularly parental interest." *Daniel Mendelowitz*

The Administrator...

You the administrator, are important to the success of the art program. Your teachers look to you for leadership and guidance. You can help by . . .

UNDERSTANDING the importance of art to the child in the total educative process.

COOPERATING with the teachers:

to provide a balanced art program for all children including the gifted and retarded.

to provide adequate materials, tools, facilities and space.

to provide time for art activities.

ENCOURAGING competence in teaching:

through programs of in-service training.

through keeping abreast with contemporary trends in art education.

through membership in and support of professional organizations.

ENLISTING the support of the community.

INTERPRETING the art program to the parents and to the community.

ACKNOWLEDGING and supporting achievements of the art students and their teachers.

ATTENDING functions and exhibits sponsored by art classes or the school.

"Creative activities and personal participation are to be encouraged and more emphasis is to be placed on providing children with creative outlets and increasing their appreciation in the arts." 1960 White House Conf.

Introduction to this Guide...

It is our intention that this guide be simple, practical, and easy to use. It provides some direction for you to develop an effective art program.

- We feel this guide is unique in organization and should be helpful to the administrator, parent, teacher, and above all, the children. The center section sets up some guide lines containing general information. One can refer to these to establish direction an art program should take.

- You will note activity packets which contain both two and three dimensional activity suggestions . . . you may arrange these to suit your needs. One should keep in mind gradual sequential growth . . . start with the simple and progress to the complex. Left pocket two dimensional. Right pocket three dimensional.

- In no case is the intent to become stereotyped. We hope to let true creative atmospheres exist where teacher and child solve art problems in various ways with countless media.

- Any suggestions made are starting points from which the teacher can adjust approaches to fit the needs of children. We have avoided grade level indications for the above reason.

- Our intent was to organize this guide so that it could adjust to changing educational curriculum, and a rapidly changing world. To keep up to date, additional suggestion sheets can be added as changes occur.

"Design is an orderly arrangement of basic elements, therefore, art is order not confusion."
A. J. Cerny

Spiral of Learning

> **"Making allowances for human imperfections, I do feel that in America, the most valuable thing in life is possible, the development of the individual and his creative powers."**
>
> **Albert Einstein**

Throughout the preparation of this Art Guide, the committee has endeavored to construct a program which will be of the greatest service to every teacher and every child in the State of South Dakota.

Our first and perhaps our most difficult task was to determine a plan of organization which would most effectively accomplish the goals of the contemporary art program. After considerable study and evaluation of other guides, we decided a SPIRAL OF LEARNING would be the most unique and helpful for the following reasons:

1. **A SPIRAL OF LEARNING IN AND THROUGH ART WOULD PROVIDE UNITY IN A K-12 ART PROGRAM**

   As it assumes a vertical expanding interrelation from one area to the next, the beginning experiences will function as a foundation for advancing experiences as recurring orientation is recognized. In this way education in and through art would be cumulative. The resulting continuity would replace the present day compartmentalization of art into specific grade levels with more effective unity gained through BEGINNING and PROGRESSIVE experiences.

   Ignorance of a continuity has caused too many teachers to follow a smattering of "piece-meal art projects" with little validity and less coherence. No wonder students often remark: "Do I have to work with clay again?" or "I did that last year." (What if Michelangelo did no more than one piece of sculpture!)

"It is the supreme art of the teacher to awaken joy in creative expression and knowledge." *Albert Einstein*

Spiral of Learning

2. A SPIRAL OF LEARNING IN AND THROUGH ART WOULD PERMIT AND ENCOURAGE A GREATER DEPTH OF COMPREHENSION.

The nature of art as a field of knowledge and discipline can be investigated with increasing profoundness through the use of this Art Guide. We have attempted to point out ways by which the beginning and progressing experiences are approached with insight, refinement, and judgment as the same art goals of art education function as a core from one level to the next in a spiral form. As comprehension develops, each child will grow in sensitivity, skills, understandings, and attitudes.

3. A SPIRAL OF LEARNING IN AND THROUGH ART WILL CONTRIBUTE TO A MORE EFFECTIVE UNDERSTANDING OF THE LEARNER'S CREATIVE GROWTH AND MORE ADEQUATELY FULFILL HIS PSYCHOLOGICAL NEEDS.

Personal approaches to art are emphasized, throughout this guide. Respect for uniqueness of expression, development of autonomy, and release through fulfillment and liberation are stressed. Experiments to provide insights into types of materials, tools and techniques are merely suggested as the teacher is reminded that these are always secondary factors to the needs, interests, and growth of the learner. Teachers are also reminded, that there is no hierarchy of art expression. None (painting, drawing, sculpture, ceramics, etc.) is more important than another. Therefore, a child should be given unlimited opportunities to work in all types of two and three dimensional art. It must be remembered too that we do not initiate or complete any one expression at any specific time or in any specific order. Children should be encouraged to draw, paint, sculpt, construct, weave, etc., on all levels of the spiral.

"Art is a process and a product, done creatively in terms of quality qualified by use and directed toward a sense of personal fulfillment."
J. Lombach

Spiral of Learning

"And out of yourself create... Look for your own. Do not do what someone else could do as well as you... Do not say, do not write what someone else could say, could write as well as you. Care for nothing in yourself but you feel exists nowhere else . . . and out of yourself create, impatiently or patiently the most irreplaceable of beings."

Andre Gide

We constantly remind teachers that the child's interests and needs are paramount.

4. **A SPIRAL OF LEARNING IN AND THROUGH ART WILL PERMIT A RICHER INTEGRATION OF ART INTO THE WHOLE EDUCATIVE PROCESS.**

   As art is based upon a heritage of man's achievements his needs to communicate ideas, feelings, and aspirations are realized. A child will recognize this need and its fulfillment as he gains knowledge of the art forms of other cultures and times. In this way he will become involved in the humanistic dimension of art expression. He will gain a richer sensitivity to human feelings as he grows in understanding of the universality of visual language. In this way integration through art will give a horizontal as well as a vertical movement in the spiral of learning. Art is education in awareness, selection, imagination, and judgment from kindergarten through high school.

For these reasons, we believe a SPIRAL OF LEARNING can realize art goals most effectively, economically, and qualitatively. With this Art Guide we have attempted to point a way. We ask your cooperation in pursuing it.

"Children need to be helped to see, to feel, to listen, to think, for out of these abilities comes the power to relate and interpret the world around them."
Elsie Halvorsen

Fundamentals . . . Lines

LINES ARE BASIC IN NATURE AND ART.

The three properties of lines are as follows:
DIRECTION . . . WEIGHT . . . and COLOR

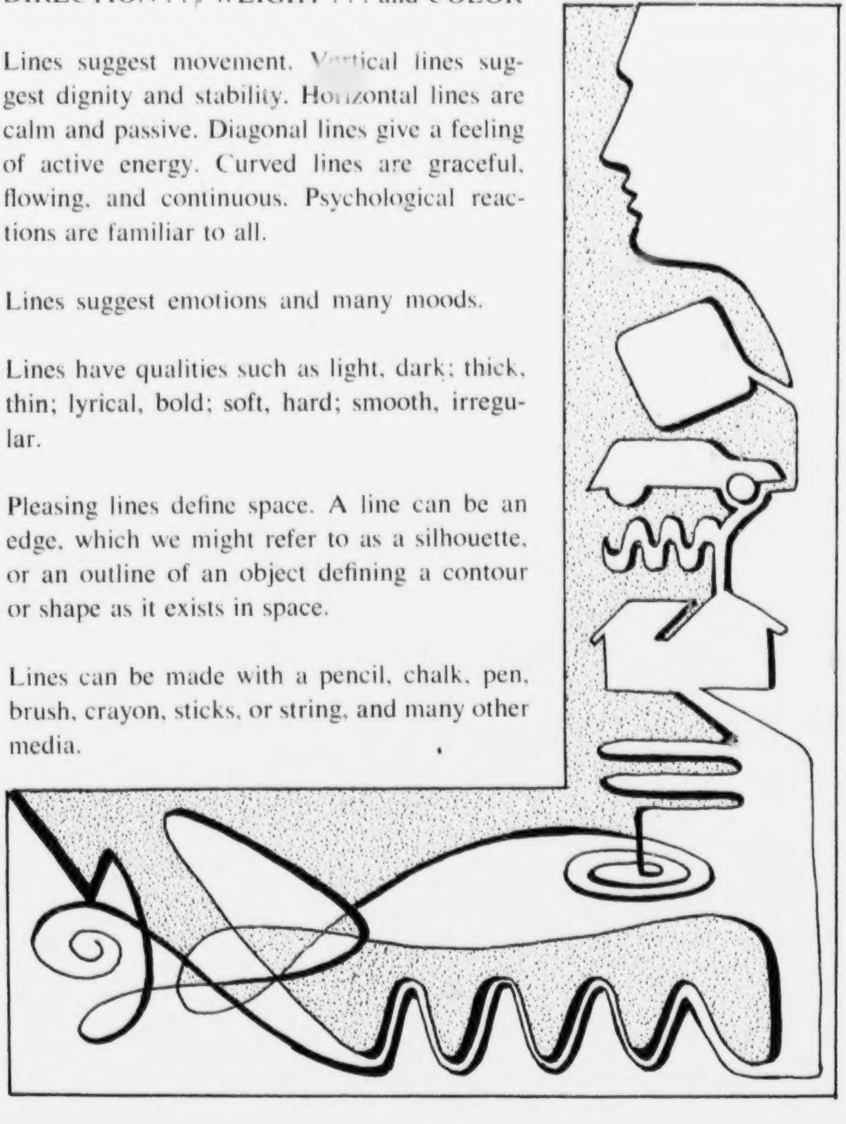
Lines suggest movement. Vertical lines suggest dignity and stability. Horizontal lines are calm and passive. Diagonal lines give a feeling of active energy. Curved lines are graceful, flowing, and continuous. Psychological reactions are familiar to all.

Lines suggest emotions and many moods.

Lines have qualities such as light, dark; thick, thin; lyrical, bold; soft, hard; smooth, irregular.

Pleasing lines define space. A line can be an edge, which we might refer to as a silhouette, or an outline of an object defining a contour or shape as it exists in space.

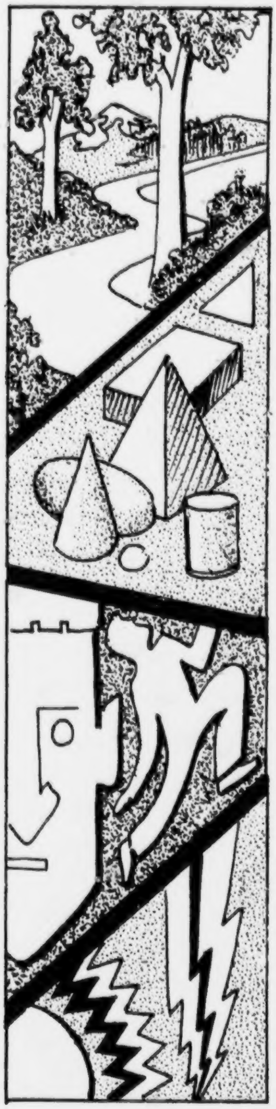
Lines can be made with a pencil, chalk, pen, brush, crayon, sticks, or string, and many other media.



"A combination of the artist's alphabet of lines have created many alphabets, languages, and communications for men." *A. J. Cerny*

Fundamentals... Forms

"The shape or structure of anything . . . All matter has form."
Webster.



Natural shapes result from natural process. Stones, eroded soil, wind blown sand, the curving course of a river, animals, man, stems, leaves, trees, blossoms, plants . . . in fact, it includes all organic life.

Mathematical shapes are regular measured shapes such as: circle, rectangle, triangle, sphere, cone, pyramid, etc. Mathematical shapes express workings of man's mind . . . laws of reason, order, and measure. These shapes are fixed, precise, therefore inert.

Artistically these forms found by man in nature are expressed simply in various ways to become manufactured, conventional designs or a form of abstraction which reduces them to their simplest structure.

Forms are organized by artists into compositions and designs, through repetition, balance, harmony, unity, rhythm, emphasis, proportion, and progression.

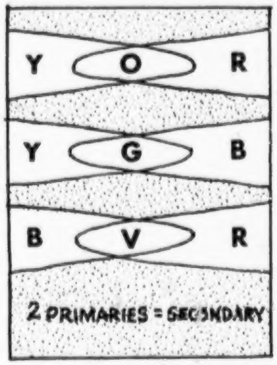
FORM FOLLOWS FUNCTION

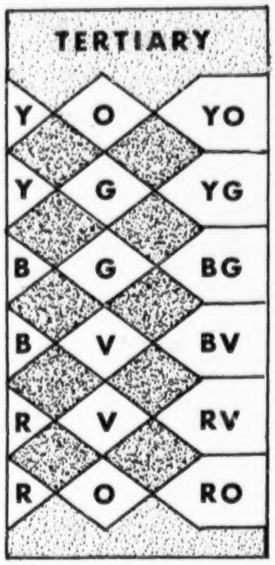
"Art allows man to enlarge his relationship with the world, to open his eyes to new aspects of the living mystery of creation and to offer certain large and small truths of human experience for sharing." *R. Beelke*

Fundamentals... Color

Understanding color principles is imperative to a successful art program. Learn to speak the language of color.

Hue:	The name of any color
Primaries:	RED - YELLOW - BLUE Cannot be produced by mixing.
Seconderies:	Result by mixing primaries. RED plus YELLOW equals ORANGE. RED plus BLUE equals VIOLET BLUE plus YELLOW equals GREEN
Tertiaries:	(Intermediates) result from the mixture of a primary and secondary. Yellow-green, Blue-green, Blue-violet, Red-violet, Red-orange, Yellow-orange.
Value:	The lightness or darkness of a color.
Tints:	Mix color into white for light value.
Shades:	Mix black into color for dark value.
Intensity:	The brightness or dullness of a color.





If color is grayed or dulled it is low chroma
If color is brilliant it is a high chroma.

Color can be grayed or dulled by adding a small amount of its opposite color on the color wheel.

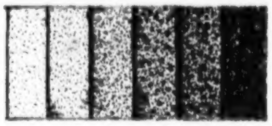
Equal amounts of complement produce gray. Green and red, blue and orange, yellow and violet, etc.

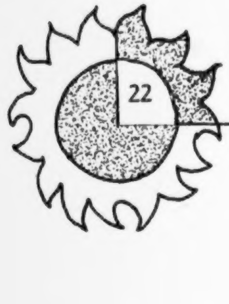
WARM COLORS suggest fire: Red, orange, and yellow. These colors tend to advance.

COOL COLORS suggest ice, water, foliage; Blue, violet, green . . . they tend to recede.

Experiment with mixing color to produce variations of hue, values, and intensities such as: Brown, Turquoise, Magenta, Chartreuse, and Beige.

VALUE SCALE





"Quanta belleza al cor gli occhi." - "How much beauty the heart perceives through the eyes."
Leonardo Da Vinci

Fundamentals... Color

Color schemes are important to understanding color applications in harmonious combinations.

MONOCHROMATIC . . . use values and intensities of one color.

ANALOGOUS . . . use neighboring colors on the color wheel. A dominating color must be carried out. Many analogous combinations are possible. Example: Yellow-green, green, blue-green, etc.

COMPLIMENTARY . . . use opposite colors, varying values and intensities. Example: Red and green, blue and orange, yellow and violet, light red and dark green.

SPLIT COMPLIMENTS . . . use opposite colors, split and choose colors on either side of the compliment. Example: Red with Yellow-green and blue-green.

TRIAD . . . uses all primaries and secondaries or three intermediate colors forming an equilateral triangle on the color wheel. Try combining light and dark, bright and dull variations. Example: Tint of red, shade of yellow, and bright blue; Tint of blue-green, shade of yellow-orange, and dull red-violet.

Choose a color scheme suited to your purpose. Determine the most important color and how you wish to use the tints and shades. Always vary the values and intensities. Color mixing is important to color harmony.

Equal amounts of color have little interest. Balance large and small amounts by using light, bright, dark, or dull color for variety.

"As the sun colors flowers so does Art color life." *Sir John Lubeck*

Fundamentals... Space

Space is the empty area around or within forms, a sort of resting and breathing.

Space is invisible, a "nothingness", unless limited by something concrete. Space is never experienced in pure form, but always defined by some enclosure which shapes it and makes it measurable, as something filled with material objects penetrated by light and saturated with color.

Earth is a spot in this universe. Our visual experience shows infinite space of the universe appearing as domical cover of a blue sky studded with stars hung in the clouds. We can comprehend limited space. Space is an interval between things . . . like pauses in speech or music . . . we can clearly see it and feel it. Shapes carved by sculptors composed by architects use space in various ways. Space in a bowl or defined by the walls of a building is a positive shape . . . just like the bowl or the building itself.

The space area on this page and in this book are concerned with the appearance of this guide.

Area-space plays an active part in a positive shape within the design. Forms, figures are shaped and proportioned with as much care as the figures themselves using area-space.

Contained air-space called volume, plays an important part in sculptural and architectural compositions. You will find examples of architecture in which carefully composed volumes play a dominant part. Masonry forms an enclosing shell within which a great body of space . . . given substance by the light which streams through it . . . reposes as in the Pantheon, moves as in the soaring nave of Amiens cathedral.

Architects and sculptors work with real masses and real space. Painters work on flat surfaces. Area-space plays an important part in their work, but air-space and volumes can only be suggested, never actually used. In spite of this, painters have striven for centuries to develop methods to overcome this limitation. How far they have succeeded in giving convincing illusion of space is a very important part of any work of art. How deep is space?

"Art education is not only a tool for survival, but a tool for making survival worthwhile."
June King McFee

Fundamentals... Texture

OF THE FIVE PLASTIC ELEMENTS, TEXTURE DEALS MOST DIRECTLY WITH THE SENSE OF TOUCH. Surfaces of objects produce tactile sensations when we touch them. The tactile value is best appreciated when an object is actually touched.

Close your eyes and run your fingers over this page, then over some article of clothing you are wearing, touch the chair in which you are sitting. Try sandpaper, fur, smooth glass, your fingers will sense the differences. Texture is the surface quality of objects such as: smooth, rough, silky, etc. Texture differences can be striking as roundness and squareness, (form differences); red and green, (color differences); and are of great importance in giving character to objects.

Contemporary architects and designers have at their disposal a great variety of textures. Efficient transportation permits them to use woods, metal, stones from far countries. Science has given them a treasure of new materials as: glass, stainless steel, ribbed plywood, concrete, and countless synthetics. Were it not for renewed interest in texture we would still be repeating the common type of interior with no surface richness or variety. For example: everything smooth and slick would be unnoticed. The surfaces would appear just monotonous.

Painters, too have reawakened to the richness and vitality given by textures. Academic painting of the nineteenth and twentieth centuries placed high premium on porcelain-like smoothness. The smoother the surface and forms, the more the painting was admired. Cezanne, Van Gogh, Picasso, Marin, and others rediscovered texture value.

HOW SHOULD TEXTURES BE USED? What are the determining principles? Here as in all other aspects of art, there are no dogmatic rules or laws. It is a matter of relationships, appropriateness to function and material. The texture of an object should be in character with its form and color, strengthening both of these elements. Textures should show definite relation one to another when used in combination. They may be harmonious or they may be deliberately selected for contrast. Some words suggesting texture are: wood, plaster, stone, glass, cotton, metal, satin, fur, velvet, wool, sandpaper, sand, leather, rug, leaves, salt, flour, sugar, etc. How many more can you add?

"You light up your imagination by stroking your mental fires through the senses - eyes, ears, nose, muscles, skin. You spur your imagination by giving it abundant data with which to work." W. A. Peterson

Fundamentals... Principles

The elements of design are the structural devices of composition. They are the "what"of content — the structure of subject matter. The principles of design are the ways and means of compositional organization — the "how" as applied to structural elements.

The principles of design apply to each element as it is used in relation to the other elements and as it is used in relation to the overall composition.

RHYTHM

The flow of movement within an element or with reference to another element or to the whole composition is achieved by:

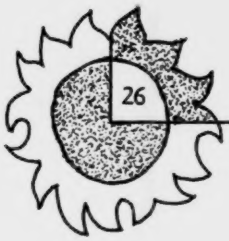
- The repetition or recurrence of an element
- Tension between the parts or certain parts
- A similarity or resemblance of these parts
- Fill-in or completing shapes by imaginary lines
- Continuance, the seeing of lines beyond their limits, creating more movement
- Recession or advancement through greater or lesser contrast with the background
- Radiation or divergence from a focal point

BALANCE

The distribution of physical properties to suggest stability, these may be:

- Symmetrical — formal — even distribution of parts — identical distribution of elements.
- Asymmetrical — informal — unequal distribution of parts — irregular distribution of elements.

The cover of this guide makes use of asymmetrical balance.



> *"I look forward to an America which will not be afraid of grace and beauty... an America which will protect the beauty of our natural environment."*
> *John F. Kennedy*

Fundamentals... Principles

EMPHASIS

Stressing elements to make more interesting or important through size, shape, position, color quality or texture.

- Emphasis creates a focal point of interest
- We find it used in interior decoration, etc.
- The artist uses it in pictorial composition
- Found also in architectural work, furniture, posters, room plans, designs, etc.

One of the important principles used in art

PROPORTION

The comparative relationship between elements for harmony and agreement. These elements should vary by:

- The amount — the size — dominance — sub dominance

VARIETY

Change or contrast within one or more elements to add interest and to avoid monotony through:

- size and shape
- color and value
- movement and direction

UNITY

All principles and elements are utilized to create unity through the combination of parts to promote a total effect

- A consistency of style and character
- Clarity of a single or main idea
- Organization of lines, space, and tonal quality

> *"The desire to do things with one's hands, to be creative and to find a means for self-expression is particularly characteristic of our age."*
> *Mendelowitz*

Drawing...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- OBJECT STUDY
- FIGURE STUDY
- STORY TELLING
- THINGS I DID
- THINGS WE DID
- IMAGINATIVE SITUATIONS

OBSERVATION

WORK, SPECIAL EVENTS,
PLAY, TRAVEL, SPORTS,
HOLIDAYS, ETC.
FAMILY, SCHOOL, CHURCH,
COMMUNITY, AND NATURE.

ADVANCED ACTIVITIES

- OBJECT STUDY
- FIGURE STUDY
- NATURE STUDY
- STILL-LIFE, LANDSCAPES,
- IMAGINATIVE SITUATIONS,
- PORTRAITURE, CARTOONS,

ILLUSTRATION

POETRY, NOVELS, DRAMA,
HISTORY, SCIENCE, AND
SOCIAL STUDIES

DESIGN

DECORATIVE, ABSTRACT,
INDUSTRIAL, INTERIOR,
FASHION, AND PRODUCT

EXPERIMENTATION

MIXED MEDIA, ABSTRACT,
AND SHADING TECHNIQUES

As an activity basic to all other art activities, drawing is most often the first activity attempted by the beginner. Children begin with manipulative scribbles, experimenting with any material that makes a mark. The scribbles eventually become meaningful and are given names. Discovery of a descriptive purpose in drawing soon leads to a symbolic use of lines to enclose space in recognizable shapes. As interest and observation of environment increase, the symbolic shapes take on more representational meanings; and the young artist draws more realistically.

This early response is intuitive and should be encouraged with activities that permit the child to develop his own interest and ability in drawing. Corrective suggestions in linear description should come only as the child requests them as he develops in ability. With a growing interest in realism the child will require more confidence in the ability to describe or make a statement; and linear problems may be presented for experimentation. With experience and increased ability, various media may be introduced. Drawing may be pursued as a separate process or a part of the processes of design and painting.

Older students with little or no drawing experience, will go through similar stages of development learning to manipulate before achieving the ability to make symbolic and represenational statements. Manipulative problems should be provided at all stages of experience when presenting new media, new processes, and new approaches to subject matter.

"I see with feeling hand and feel with seeing eye." *Goethe*

Painting...

The act of organizing a flat surface by means of pigment is one of the oldest means of expression and communication. Every child should be encouraged to paint according to his own level of ability and develop at his own rate. Progress through developmental stages occurs when the pupil is given sympathetic understanding by teachers and parents. Do not judge paintings by adult standards.

As the child seeks to express his own best ideas in his own way, the teacher guides him in the use of design elements and principles. Proportion, balance, emphasis, rhythm, opposition, unity, harmony, and variation are stressed as the pupil grows in his ability to use them qualitatively. His work will gradually show greater action, feeling, mood, and increased detail.

Pupils will become more selective of their environment and methods of representation. His depth of perception in landscapes, seascapes, animals, and portraits improves. Group work, murals, etc. are enjoyed. More difficult media and tools may be introduced.

Greater skills are developed as the pupil experiments in wash and brush techniques. Representational and non-objective approaches should be encouraged. Greater aesthetic quality develops as pupil displays deeper involvement with color and other design elements.

Personal styles and techniques should be encouraged and refined. The various painting trends should be presented through visual aids. Better tools and materials are introduced as the student advances into fresco, oil, casein, encaustic, ink, honey and egg tempera, and the mixed media.

As the students advance the desire and appetite for painting will improve and the mastery of the media becomes successful. Try painting experiments with the children.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- SPONTANEOUS MANIPULATION OF MEDIA & TOOLS DEVELOPS INTO GROWING AWARENESS OF THEIR ENVIRONMENT AS PUPILS PAINT.
- PEOPLE - ANIMALS
  HOLIDAYS & SCENERY
  AND DAILY EVENTS
- FIRST EXPRESSION ON A BLACKBOARD USE LARGE BRUSH AND WATER
- PAINT STRIPES AND OVERLAP STRIPES FOR COLOR EXPERIMENTS
  PAINT LARGE ON FLOOR
  PAINT AT THE EASELS
  SPONGE & FINGER PAINT

ADVANCED ACTIVITIES

- COLOR EXPERIMENTS
  COLOR WASHES AND
  COLOR BLENDING
- SHOULD UNDERSTAND THE POSSIBILITIES OF COLOR AND PAINT WITH TEMPERA, CASEIN, WATERCOLOR, AND MIXED MEDIA
- CHALLENGING COLOR PROBLEMS INVOLVING HARMONIES AND VALUES.

"A picture is not wrought by hands alone...but by thought." *Anon.*

Sculpture...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

MODELING - DECORATIONS, POTTERY, JEWELRY, MASKS, FREE FORM, FIGURINES

ASSEMBLING - DECORATIONS, TOYS, STABILES, MOBILES, COLLAGE, MOSAICS, MODELS, AND PLAQUES

MOLDING AND CASTING - ONE PIECE MOLDS, RELIEF SCULPTURE, JEWELRY, PLAQUES

CARVING - FREE FORM, CHIP, RELIEF, FIGURINES

ADVANCE ACTIVITIES

MODELING - DECORATIONS, TILES, JEWELRY, RELIEF, FREE FORM AND CERAMICS

ASSEMBLING - ARCHITECTURE, PAPER AND WIRE SCULPTURE, INDUSTRIAL, STAGE SETS, DISPLAY, STABILE, MOBILE

MOLDING AND CASTING - TWO AND THREE PIECE MOLDS, PORTRAIT HEADS, FREE FORMS, SIMPLE AND COMPLEX FIGURES, COMPLEX POTTERY

CARVING - IN-THE-ROUND STONE, WOOD, PLASTIC, AND SYNTHETIC STONE, SALT BLOCK

MODELING

As an introduction to three dimensional design, modeling activities are adaptable to any art program because of simplicity, availability, and economy of material. The pliable plastic materials used are easily manipulated and serve to develop muscle control and coordination.

The process of constructing is basically simple but can be carried to a high degree of complexity and refinement as dexterity, capability, and craftsmanship improve.

ASSEMBLING AND STRUCTURING

Any material that can be glued, stapled, wired, nailed, or fastened together in any way for stability is suitable for assembled design.

As an art activity assembling provides experiences in material usage and aids development of coordination through the manipulation of materials. Scrap materials offer variety for experiments.

MOLDING AND CASTING

Simple molds can be made from boxes, box tops, or slabs of cardboard or wood. Base materials such as: clay, wax, and plaster can be placed into the mold form, then modeled or carved into designs.

Plastic material thinned to a liquid can be poured into the mold and allowed to dry. Remove dried object and re-use the mold if desired. Two and three piece molds may be formed around objects that have been previously modeled in clay, wax, plaster, papier mache and other materials. The molds may then be used for duplication of the modeled object by casting.

CARVING

In contrast to the other processes of construction, carving involves the taking away of parts of a solid material rather than the adding to or building up of a solid structure. It is the process demanding some skill in the use of materials and tools. Relief and in-the-round carving may be done with simple tools in easy to handle materials as the students have developed muscle control and coordination.

"What so ever thy hands findeth to do, do it with thy might." Eccles.

Printmaking...

Printing is a process of impressing a composition from a master surface onto a paper or cloth. The artist either cuts or draws on the master surface, and the original design is transferred as many times as desired.

There are four main groups of prints: Those produced by relief cutting, intaglio prints, planographic prints, and those made through a stencil process.

A relief print is a cut-away design in which the area left standing makes an impression while the background is cut away from the block surface. Ink is applied to the block which is then pressed onto paper or cloth. Wood and linoleum are the usual materials for block prints, but elementary printing might be done with potato, carrot, eraser, clay, gadget, etc.

Intaglio is the opposite of relief in that the cut-away areas hold the ink and do the printing. A metal plate is inscribed with the artist's design, inked and then the surface is wiped clean so ink remains only in depressed areas. Contact with damp paper produces an intaglio print. Etchings, engravings, aquatints, dry points, and mezzoprints are all variations of intaglio.

Planographic prints are produced from a flat printing surface and are usually called lithographs. This has traditionally been done by drawing with a grease pencil on stone, but newer methods are bringing it closer to the classroom. A litho sketch kit is now available which makes it possible to draw on a plastic surface. The drawing is treated chemically to resist water and accept oil when pressed onto the paper.

Stencil printing is a simple form which children can easily master. Even the serigraph or silk screen print, is not too difficult for school children. Ink or paint is pressed over a paper or cloth surface and does not print where the stencil protects the material. Only the cut away areas will carry the print.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

SPOOL AND DOWEL PRINTS,
CLOTHESPINS AND STICKS,
WOOD BLOCKS AND STRING,
POTATO AND CARROT PRINTS,
ERASERS AND GADGETS

TEXTURE PRINTS OVER
SCRAPS OF MATERIAL

CARDBOARD, CORK, AND
RUBBER BLOCK PRINTS

CRAYON FOIL PRINTS

PLASTER, SOAP PRINTS
RUBBER BAND PRINTS
STENCIL PRINTS SIMPLE
LINOLEUM BLOCK PRINTS

ADVANCED ACTIVITIES

LINOLEUM, WOOD AND
CELLULOID PRINTING

STENCIL AND SCREEN
PROCESS PRINTING

PLASTER, SOAP AND
WAX BLOCK PRINTS

MONOPRINTS, GLUE,
LITHOGRAPHIC, AND
MISC. PRINT MATERIAL

ETCHING, ENGRAVING,
DRY-POINT, AQUATINT,
MEZZOPRINTS.

Paper Sculpture...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

PAPER CAN BE FOLDED, CUT, TORN, CURLED, & PASTED.

ONE FOLD CUT, DEVELOP SIMPLE TEXTURES AND SURFACE PATTERNS FOR FLOWERS, DECORATIONS, BIRDS, MASKS, FIGURES,

DECORATIVE FLOATS, DISPLAYS, CROWNS, LAMPSHADES, FORMS, CHRISTMAS ORNAMENTS, GEOMETRIC FORMS, FUNCTIONAL FORMS.

ADVANCED ACTIVITIES

THREE DIMENSIONAL SCORED FORMS, WITH INTERLOCKING PIECES, ABSTRACT SCULPTURE, ARCHITECTURAL FORMS, AFRICAN MASKS, TOTEMS, SCULPTURED FACES, THREE DIMENSIONAL ANIMALS, FIGURES, OBJECTS. PACKAGING CONSTRUCTIONS INVENTIVE STRUCTURES

Paper has never been fully exploited. It has usually filled the role of a passive carrier of other art media. Paper offers unlimited challenges as a creative art medium by itself. It is readily accessible, comparatively inexpensive, requires few tools and equipment and stores easily.

A beginner finds pleasure and satisfaction in experimenting and manipulating paper. As pupils see their paper forms take shape they gain a new perspective as awareness of closed, open, and expanding forms result.

As students develop in ability seeing paper taking on new and interesting dimension, they plan, solve artistic problems and make judgments as a designer artist. His explorations of paper as an art medium lead him to discover characteristics, possibilities, and limitations. As they are challenged with many problem-solving activities, visualization improves. They develop an awareness of commercial uses of paper, such as: the various packaging items in use.

Paper sculpturing adapts to all age levels and abilities. As it stirs an interest in accuracy and quality craftsmanship they develop an appreciation of Japanese origami paper folding techniques. Advanced problems with paper really bring out the student's creative ability. Simple folds, to very complex ones, develop sequentially and gradually. Students can achieve a high degree of success with this medium.

Pupils can have numerous experiences with limited tools and expense, which can easily be projected to free time and out-of-school and hobby activities. Art vocabularies are enriched with such words as: plane, score, flexible, pliable, overlap, interlock, abstract, etc. The learner can be introduced to experimentation with design elements in new ways.

"I have a blank piece of paper, nothing on it. It is white blank meaningless. But what wonderful possibilities it possesses." R. L. Stevenson

Papier Mache...

Papier mache is a French word which means mashed paper. It designates both a process and a product of paper combined with wall paper paste to form three dimensional objects. Torn paper pulp, strip, and laminated sheets when combined with paste make strong attractive articles, which challenge the imagination at all levels.

Papier Mache is important because it:

- Interprets design in a new and exciting way
- Inspires students to three dimensional thinking
- Challenges all levels of pupils in problem solving
- Offers opportunities for individual and group work
- Develops skills and finger dexterity in the use of many tools and materials.
- Integrates effectively with many other subject areas
- Develops appreciation of other cultures and times
- Encourages fantasy and imaginative thinking
- Provides the school with attractive displays
- Stimulates out of school activities and hobbies
- Allows pupil to do independent free-time work
- Makes pupil aware of papier mache in his environment such as: commercial packaging, displays, and storage
- Adapts easily to the school with a limited budget.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

MODELING FROM PULP
ANIMALS, PEOPLE,
BIRDS, MASKS, ETC.

SIMPLE STRIP AND
SHEET METHOD:
MASKS, FUNNY HATS,
PARTY DECORATIONS,
TOTEMS, PUPPETS,
TRAYS AND BOWLS,

DECORATIVE MAPS
TERRAIN, DIORAMS,
MUSICAL INSTRUMENTS.

ADVANCING ACTIVITIES

INTRODUCE ARMATURES
FOR LARGER, STRONGER,
ANIMALS, PEOPLE, ETC.
GROUP WORK
SCHOOL MASCOTS, FLOATS,
SCHOOL INSIGNIA AND
STAGE PROPS.

JEWELRY

RESEARCH INTO PAPIER
MACHE AS HISTORIC AND
CULTURAL FORMS:

N. AMERICAN INDIAN MASKS,
MEXICAN PINATAS
CHINESE WAR IMPLEMENTS.

"Through education in the fine arts we must instruct others to reach deeper levels of learning." *Beverly Davis*

Collage...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

COLLECT:

SCRAP MATERIAL OF
VARIOUS TEXTURES
SANDPAPER, CLOTH,
STRING, PLASTICS,
YARN, CORK, WIRE,
CELLOPHANE, TISSUE,
CORRUGATED PAPER,
BUTTONS, RIBBONS,
RUBBER, FELT, ETC.

DESIGN COLLECTED ITEMS
MAKE CLOTHED FIGURES
MAKE MAGAZINE COLLAGE
LANDSCAPES, 3-D FACES

ADVANCED ACTIVITIES

ABSTRACTS, FIGURES,
FACES, & LANDSCAPES,
ANIMALS, & FLOWERS,
UNDER SEA SCAPES,
SPACES PICTURES,
MAGAZINE COLLAGES

A collage is a picture made by applying different materials to a flat surface. The word "collage" comes from the French word "coller" meaning to paste or stick. Children who have had stimulating experiences in elementary school with collage materials can continue through junior high and beyond. Collage is a useful means of exploring art principles. A study in two-dimensional design is easier in collage because the student works with actual shapes and materials which can be easily moved until a satisfactory arrangement can be achieved.

A wide variety of materials should be kept on hand. Special materials can be bought but many scrap materials are both beautiful and useful. Collecting these materials awakens both teacher and pupils to textures and patterns around them. Keep collage materials collected in good order, properly labeled to avoid confusion. Use labels such as: rough, smooth, shiny, wood, transparent, small objects, beads, string, etc. Shoe boxes make good containers.

It is important to set out materials collected by teacher and children in an inviting way so each child will be inspired to make a thoughtful selection. Place trays, box tops, on table in front row, or a neat row on the floor. Stress replacing in the proper labeled boxes to prevent a cluttered effect. Encourage each child to use these materials in his own way. Through discussion and suggestion the teacher helps the children to learn how to make their own choices.

Motivations should be broad enough to include those who use materials to make non-representational designs, also those that suggest a subject. The teacher might say "Here are some rough materials and some that are soft." "What do the rough ones suggest to you?", etc. At times a teacher may suggest that each pupil choose a subject and find materials most suited to it. He could either make a design that expressed the feeling of the subject or make a collage picture of it.

"The art of teaching is the art of assisting discovery." *M. Van Doren*

Mosaic...

Mosaic is one of the oldest art forms which is being revived and used by the children in the classroom. One can turn to history for many fine examples for this old art form. It has been adapted to the curriculum of today so that any classroom can take advantage of its many attributes. Mosaic work develops patience, is self-disciplining and brings out such qualities as: neatness, careful workmanship from any pupil attempting it.

It is wonderful for teaching subtle color value changes. The manipulative and hand coordination skills are developed through thought provoking problem solving techniques. The teacher should be cautioned to keep the elementary problems at the child's level and as experience is gained to try to encourage further exploration with varied art materials.

Kindergarten children need the cutting, tearing, and pasting experience that mosaic work provides. Many kinds of discarded materials lend themselves to mosaic work. Pull aparts, fold overs, light and dark, contrasts are some of the preliminary mosaic process names. Beginners make use of simple shapes and forms disregarding the spaces between the mosaic pieces. As the pupil advances they include the spaces in their planning.

This work is time-consuming and very exacting but the students enjoy the self-involvement. An excellent opportunity for the independent work of the pupil at seatwork time or when other work is complete.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- COLLECT:
  PAPER, MAGAZINES,
  TILES, WALLPAPER,
  RIBBON CLIPPINGS,
  SUEDE, STONES,
  GLASS, LINOLEUM,
  CARDBOARD, FELT,
  MACARONI, COLOR
  WASHES, ETC.
- PUZZLES SCRAP NO SPACES IN MOSAIC
- PULL APART SHAPES
- SIMPLE SHAPE CUT APART REPASTE
- PEBBLES AND SEEDS
- EGG SHELLS, RIBBONS

ADVANCED ACTIVITIES

- STAINED GLASS EFFECTS
- SCRAPS CUT INTO IMAGINATIVE FORMS
- COLOR WASHES USED IN MOSAIC PROBLEMS
- PASTE ON DARK BACKGROUNDS
- SEEDS, PEBBLES, & EGGSHELL MOSAIC
- TESSARE TILES, TRIVETS, TRAYS, TABLE TOPS AND WALL DECORATIONS

"To find no value in the past is to lose perspective in the present."
B. Davis

Stabiles - Mobiles...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

FORM VARIOUS SHAPES
VARY THE SIZES

LOCATE BALANCES

CARDBOARD CUTOUTS
COVER WITH TISSUE

WOOD NOTCHED AND
COVER WITH STRING

MAKE FACE MOBILES

FIGURE AND ANIMAL
USED IN MOBILES

ADVANCED ACTIVITIES

FISH MOBILES

METAL FREE FORMS
USED IN MOBILES

NOTCHED DOWELS
INSERT AT VARIOUS
ANGLES IN WOODEN
BASES . . . STRING
LINE GENERATORS
TO MAKE STABILE

TOOTHPICK STRUCTURE

APPLIED TO STABILES

A mobile is sculpture that moves in space. Many objects come within this definition: a chandelier, hanging Christmas decorations, wind chimes, etc. The term "mobile" was given to a form of sculpture developed by Alexander Caulder. It is a series of shapes projected into space by a means of suspended rods and wires. As an art form, a mobile should be a unified design suspended in space so that the various parts may shift in currents of air to form different patterns.

- One type uses wire, rod, or dowels to support hanging shapes
- A second type of mobile will suspend shapes one from another
- A third style unifies wire, rod, or dowel and attached shapes

The component parts of a mobile should lend themselves to movement. Equal sizes and shapes should be avoided. Formal balance tends to be static. Groups of units should be uneven in number, i.e., three - five and seven. Size and shape gradation add aesthetic interest. Balance points play an important part in construction and if not present movement will not result. Children develop an appreciation of aesthetic free forms, and are fascinated by movement in space.

A stabile is a form of sculpture attached to a stationary base. It is constructed of abstract lines and shapes which are assembled to form a changing pattern as the viewer moves around the structure.

A stabile may be made of one material only, or a combination of materials, such as: paper, wood, metal, strings, and wire.

Materials may be assembled on a solid base for support or adhered or attached, part by part, so that the structure supports itself.

For interest and variety, moving parts may be suspended from the stationary appendages.

"While science reaches for the minute core of truth, art restores its magnitude." *Beverly Davis*

Metalry...

Metal work has many facets. It may include foil work with aluminum, copper enameling, etching of aluminum, beating, sawing, piercing, and soldering. Jewelry as part of metal work is really in a separate category because of the special equipment needed.

Many of the problems to be discussed are limited to exploration at the junior and senior high levels, however, with soft metal containers and foils and with careful planning many projects can be devised to be used at the elementary level. Simple tools can be made by the children, even scissors can be used.

The pupil soon learns good planning is of extreme importance. His work improves in quality with experience. An appreciation of early American craftsmanship and of early history develops. Many techniques are learned through the metalry processes. Pupils gain independence in working out metal designs. The problem-solving is a good approach. Stress safe, orderly habits of operation. Stress quality with experience and emphasize good design. Develops the pupil's sense of critical analysis, as he strives for inward satisfaction. Pupil learns care of materials and the use of various tools, and sharing when necessary.

Pupils learn the basic techniques for understanding the process, they are then encouraged to use creative design approaches. Teachers should clarify the thinking needed, striving for a creative atmosphere, where possible meet the individual needs. Plan, explain, demonstrate. apply, and analyze each process. A sequential approach is essential. Many schools lack special equipment but some of the basic processes can be done with home-made and inexpensive tools in the elementary grades.

Pupils are encouraged to work independently, think sequentially, make their own designs and carry them out on an individual basis. Quality workmanship is stressed so the pupils take pride in their own accomplishments.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- MAKE TOOLS FOR USE IN FOIL WORK
- ALUMINUM TOOLING
- COPPER TOOLING
- FOIL PRINTING
- TIN CAN CRAFT AND CHRISTMAS ORNAMENTS

ADVANCED ACTIVITIES

- COPPER ENAMELING
- ALUMINUM ETCHING
- COPPER FORMING
- SAWING & PIERCING
- ANNEALING COPPER
- SOLDERING FINDINGS
- FILING & POLISHING
- BEATING INTO MOLD
- BEATING INTO SANDBAG
- SURFACE DESIGNING

"Anything one man can imagine, other men can make real." J. Verne

Jewelry...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- TWISTING WIRE
- COILING WIRE
- HAMMER WIRE
- WRAP WIRE AROUND
- STONES - PENDANTS
- PAPIER MACHE FORMS
- CERAMIC JEWELRY

ADVANCED ACTIVITIES

- WIRE SOLDERING
- BROOCHES, PINS,
- RINGS, BRACELETS,
- TIE CLIPS, BUTTONS,
- CUFF LINKS, BUCKLES,
- NECKLACES, ETC.
- ENAMELED PIECES
- CERAMIC & METAL
- ANNEALING
- APPLIQUE WORK
- BINDING
- BURNISHING
- CHAIN MAKING

Jewelry as an art form in most cases would be limited to junior and senior high. Primarily, cost of special equipment would be prohibitive. Many forms of simple jewelry at the intermediate level are possible such as simple clay pressed forms, small wood, and wire form jewelry. The pupil needs to experiment with the materials to discover their properties . . . do they break, bend, twist, shape, coil, will a hammer break them or help form them? Gluing and soldering can be tried. Purchase findings (ear, cuff, pin clasp) and experiment as to the best means to attach clay, wood, or metal to these findings. Many questions will need answers which can be provided through experimentation. They should know the possibilities and limitations of other media used.

A design should be required before application and each project needs evaluation upon completion so that the class can benefit from the experiences of others. Many decisions are made during the exploration period. A sequential series of processes will be necessary. Techniques should be mastered on simple problems first. As students advance the problems and techniques become progressively more difficult. Quality and originality should be stressed. Quality equipment, tools, are cheaper in the long run. Do not try to get by with inferior tools.

Beginning jewelry experiences can be very rewarding if materials are used which can be made or found in the students' homes. Simple papier mache and salt clay mixtures are good starting points. All found objects should be regarded as possibilities for creative development. Paper, cloth, yarn, nylon thread or fishline, rice, beans, seeds, macaroni, aquarium chips, wood, plastic, soft metal containers, clay, and pretty stones are some of the many items easily available. Often unusual effects can result if students are allowed to use their own imaginations to fashion individual jewelry designs. Strive for variety of expression instead of having all children do exactly the same thing.

"We can do anything we want to do if we stick to it long enough."
H. Keller

Lettering...

Lettering is important to communication. It can be useful in correlation with other subjects. Develops self-discipline and challenges pupil to improve his skill. Lettering can serve as a springboard to gain interest and pupil confidence. Many art principles and elements are utilized in lettering problems.

Children need experience in lettering. This is one skill most children can use in future employment. Lettering problems should lead to a feeling of success and achievement. Student abilities should be challenged but not be so technical as to lead to boredom or frustration.

Lettering can become a useful, interesting and sequential developmental tool for gaining further knowledge. Remember enthusiasm is contagious. If the teacher is not enthusiastic even though they themselves do not like lettering you can be sure the students will react to what they see. Children can be prepared for lettering and reading through design. This procedure utilizes the principle for reading. Top left to right, left to right, left to right is repeated in design work thus preparing the eye for the same procedure in reading.

Lettering can promote behavior, health habits, moral code, etc. The advertising principles of simplicity, clarity, balance, and appeal are learned through lettering problems. TRAVEL, SAFETY, PROVERBS, BELIEFS, and BEHAVIOR can be taught to pupils as they solve lettering problems. Appreciation of the skills necessary to do quality lettering becomes apparent. Students will realize the values of spelling, arrangements, balance, unity and organization. Many examples are available for them to see where layout principles are used in advertising. Look for effective ones such as magazines, newspaper ads, billboards, etc. Much can be gained through lettering.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES
- SPACE FILLING
- FOLD PAPER DESIGNS
- FOLDED NAME DESIGNS
- CUT - NAME DESIGNS
- SPACE FILLING OF LETTER DESIGNS
- MAKE WORD DESIGNS
- CUT PAPER LETTERS
- NAME REPEAT DESIGNS
- MANUSCRIPT - CURSIVE

ADVANCED ACTIVITIES
- MONOGRAM DESIGNS
- LIGHT-DARK DESIGNS
- CUT PAPER LETTERS
- SPEEDBALL LETTERS
- CONVERT WORDS INTO FORMS: CAR, HOUSE, MAN, CAT, HAT, ETC.
- WORDS WHICH SUGGEST FEELING: COLD, HOT, WEAK, SOFT, STRONG,
- THREE DIMENSIONAL LETTERS, POSTERS, PROVERBS, ADAGES.
- BOOKLET DESIGNS

"Art is the signature of man." *G. K. Chesterton*

Puppetry...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- PUSH PUPPETS
- PULL PUPPETS
- SACK PUPPETS
- STICK PUPPETS
- MITTEN PUPPETS
- FINGER PUPPETS
- CARDBOARD PAPER
- ENVELOPE PUPPETS
- STAIRCASE FOLD TYPE

ADVANCING ACTIVITIES

- ARM & HAND PUPPETS
- MARIONETTES
- CHINESE SHADOW TYPE
- MAKE A STAGE AND
- THEATER FOR PLAYS
- STUDY SCENERY,
- PROPS & LIGHTING
- USE OF CURTAINS

One of the oldest forms of entertainment is puppetry. Every child looks forward to working in this intriguing art. Shy pupils who normally would not share ideas or express themselves feel at home when talking to a puppet they create. Stories and plays should be written and acted out by the children.

Puppetry encourages unlimited creativity in several art expressions: making puppets, writing scripts, dramatic arts, and musical accompaniment. Puppetry develops the imagination as the inanimate objects become live characters. In a constructive way the play and fantasy element is exploited. Coordination of skills and inventiveness is brought about through the use of unlimited materials and tools. Puppetry correlates areas of learning, such as the language arts, health, social studies, etc. These become interesting and meaningful, as they contribute to security in self-expression.

Group participation without loss of self identity is promoted. Puppetry helps anti-social and aggressive pupils to cooperate. It contributes to good home-school-community relationships and opens opportunities for understanding other cultures and appreciation of one's own heritage. It adjusts easily to any age group or ability level, helps the teacher to recognize talent and potentialities of children.

Puppetry is popular in all cultures, with all people of all times. Puppets can be used for education or entertainment. Use simple approaches for very young children and develop to complex string marionettes. Puppetry aids in understanding and evaluation of commercial entertainment, as T.V. puppet shows. Pupils enjoy performing before other pupils and parents. Group participation is promoted and is one of the best art media to gain child-confidence. Puppetry teaches ways of costuming, promotes research, and provides hobby and leisure-time activity. It is an outlet for pretense, fantasy, and imagination.

"Often through the medium of the puppet the child finds himself able to express thoughts, ideas, feelings that he otherwise could not." *E. Mattil*

Stitchery...

Like mosaics, stitchery is one of the oldest art forms. Children will readily adapt to this art media if they learn some of the basic stitches. Sewing cards are a beginning. Use of embroidery hoops keeps cloth taut as sewing stitches are tried. Simple outlines attempted first give both boys and girls experience in a media in which all can succeed. Finger dexterity is developed in threading needles. Necessity for careful planning is recognized.

With experience in earlier attempts children will gradually be able to advance to more complex approaches, such as: applique, French knots, fill-ins, or combinations to open up new vistas of discovery. Actually students design and paint with cloth and threads. Sewing with threads of various thicknesses is like taking a walk with a line. Spacing, the weight of threads, and distortions of various kinds of stitches give new ways of working with stitchery.

Group or individual activities are possibilities with this art form. Large tapestry hangings are challenging. Encourage students to explore, design, and carry out stitchery projects of their own rather than pre-stamped patterns. Manipulative finger dexterity results from this type of activity. The boys show a surprising interest in this art form.

Line generations interest both sexes. This is an excellent mathematical correlation. Color variations are possible with the changing of thread or string color. Pennsylvania Dutch designs for wall hangings, pictures, cross stitch designs, huck towel designs are some of the many possibilities of this intriguing medium. Start with a simple criss-cross sampler design and lead to more complex creations. If parents could view the keen interest of children in this medium they would make materials available for them in the home and would encourage this activity. Children have a sense of personal satisfaction and accomplishment from this type of activity.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

RUNNING STITCH
OUTLINE STITCH
STRAIGHT STITCH
SATIN FILL STITCH
HERRINGBONE STITCH
CROSS STITCHING
BLANKET STITCH
CHAIN STITCHING

ADVANCED ACTIVITIES

LADDER STITCHES
LAZY DAISY STITCH
FEATHER STITCHES
COUCHING THREADS
FRENCH KNOTS
BACK STITCHES
APPLIQUE WORK
LINE GENERATIONS
WHEN DIFFERENT
STITCHES ARE USED
THE APPEARANCE OF
THE OBJECTS CHANGE

"Habit is like a cable: we weave a thread of it every day, and at last we cannot break it." *Horace Mann*

Weaving...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- CUT PAPER STRIPS
- MAKE WEAVING MAT
- WEAVE PAPER STRIPS
- CARDBOARD WEAVING
- CARD TWIST WEAVES
- RAFFIA-REED WEAVE

- WEAVE CREPE PAPER THAT IS TWISTED

ADVANCED ACTIVITIES

- LOOM WEAVING
- BRAIDING LACES

- CANING SEATS FOR CHAIRS

- RUG BRAIDING
- PLACE MATS

- MAKE PURSES, BELTS, HOT PADS, SCARVES

Since early times man has used available materials to satisfy his needs. Through weaving methods he has made his clothing, his containers, even his straw reed bamboo home. Unusual tapestries, rugs, and cloth from Arabian times are still exhibited in many museums throughout our country and the world. Early Indian weaving examples show man's attempts to use available materials to make usable articles.

With today's technical industrial skills, many of the woven articles which were once produced by the hand of our American pioneers have been relegated to hobbies. Spinning wheels, once a common sight in every home, have almost all disappeared. Even toy manufacturers, knowing man's desire to make things, have made weaving looms for children using stretch bands of scrap fibers. Weaving makes students appreciate the work that goes into manufacturing our clothing materials.

Paper weaving teaches basic basket and other simple weaves. Cardboard, card, and simple loom weaving can be attempted. Frames are easily made for school purposes. Raffia, crepe paper, reed weaving projects are also possible, using native materials. Crepe paper can be twisted by hand or power drill. Braiding lace and knotting are also forms of weaving.

Cut paper simple strip designs can be woven into very interesting designs. These weaving strips are large enough for the young, who need finger dexterity and large muscle development to enjoy this approach. As the child matures more complex and difficult tasks can be attempted. Weaving can be intriguing and complicated and will be difficult for the impatient pupil. Once the process is mastered the student can work independently designing and working out textiles or variations of the weaving skills.

Design...

Design is basic to all creative activity.

Design is organization, using structural elements and principles of the art fundamentals for interesting, pleasing and meaningful order.

No one element of design is used alone. Each element is used in relationship to the other elements.

Every principle applies to each element as it is used in organization.

TWO DIMENSIONAL DESIGN

Beginning experiences should encourage an intuitive and spontaneous approach to spatial design. Materials and tools should be used to promote free expression of ideas. Fundamentals and rules may be applied to problem solving as experience and ability indicates.

Advancing experiences should continue to encourage a free expression in the use of art fundamentals. Problematic application of the fundamentals should be experienced with the elements and principles of design and can be used both emotionally and intellectually.

THREE DIMENSIONAL DESIGN

Beginning experiences should develop spatial awareness through the use of planes and solids. Knowledge of materials and tools should come from experience and use. Structural design develops perception and muscular coordination.

Advancing experiences should make use of more difficult techniques and processes to apply the art fundamentals to the expression of more purposeful and meaningful ideas in design.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- 2-D PICTURE COMPOSITION
- DECORATIVE DESIGN —
  BORDER, BOOK COVERS,
  ALL OVER REPEATS, &
  TEXTILE DESIGNING
- PRINTMAKING —
  GADGET, MOSAIC,
  BLOCK, COLLAGE
- 3-D RELIEF CARVING —
  MODELING FIGURINES
  FREE FORM, POTTERY
- ASSEMBLING —
  STABILES, MOBILES,
  MODELS & JEWELRY

ADVANCED ACTIVITIES

- 2-D PICTURE COMPOSITION
  APPLIED DESIGN - MOSAIC,
  TEXTILES & STITCHERY
  COMMERCIAL ART AND
  PRINTMAKING
- 3-D IN THE ROUND CARVING
  ASSEMBLING - MODELS,
  MOBILES & STABILES
  MODELING - FIGURINES,
  CERAMICS JEWELRY AND
  APPLIED DESIGNING
  WEAVING AND BASKETRY
  STAGE SETS, LANDSCAPES,
  ARCHITECTURAL, INDUSTRIAL

"Art is always the same, but ideas change and new methods are indicated. That's how we make progress." *Piet Mondriam*

Architectural Design...

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- BASIC GEOMETRIC FORMS
- CUBE, PYRAMID, CONES,
- COLUMN EXAMPLES

- LOOK FOR EXAMPLES OF:
- CHURCHES, BUILDINGS,
- HOMES, DOMES, SCHOOLS,
- BANKS, STORES, ETC.

- OLDER HOME STYLES OF
- ARCHITECTURAL PERIODS
- MODEL BUILDING

- COLLECT EXAMPLES OF OLD
- CONTEMPORARY, & MODERN

- VISIT MUSEUMS OF NEARBY
- CITIES. BECOME AWARE OF
- ARCHITECTURAL FEATURES

ADVANCED ACTIVITIES

- CIVIC PLANNING
- INTERIOR DESIGN
- LANDSCAPE DESIGN
- ARCHITECTURAL STRUCTURES
- SKETCHING IN PERSPECTIVE
- STUDY NEW BUILDING STYLES
- MAKE MODELS OF COMMUNITY

The architect works with steel, wood, and concrete masses and enclosed space. The emphasis the architect places on these largely determines the appearance of his buildings as in ancient temples of Babylon and Egypt.

1. Where solid mass is emphasized (Egyptian) buildings tend to be block shape. Exterior more important than interior. Architect is a sculptor.

2. Where enclosed space is emphasized the domical interior of the Church of Hagia, Sophia, the building is a mere shell. The architect composes his space aims for visual effects of light, atmosphere, and color.

3. Where emphasis is on mass and space, the building becomes a cage, a scaffold or a skeleton. Gothic cathedrals of France are good examples, curtains of glass. Many steel and glass modern constructions fall into this category.

The materials used strongly influence structure, use of large cut stone, promotes solid construction. The use of post or lintel system gave us many beautiful temples such as the Greek Parthenon. Use of brick or the small cut stone is suitable for vaulted or arched construction. Steel makes use of the cantilever principle. The architect can emphasize the qualities of the materials he works with. He can conceal them or deny them. Examples: Weightless use of stone almost lace-like in Gothic architecture. Space can be composed by the architect.

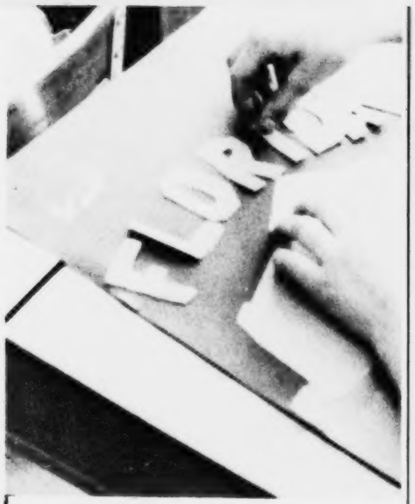
Aesthetically the architect is also concerned with the site. The relationship of the building to the surrounding calls for different solutions. Some detach the building from the setting while others seek a harmony with the surroundings, sometimes to a point of camouflage.

Architects must be visionaries, able to design for present and future; organizing space for people's use at work, home, and play. An architect enhances a community by creating beautiful and practical buildings.

The newest area of architectural design is in the redesigning of old cities and the replanning of whole communities as in Brasilia. The concept of city-planning which is seen in Washington, D.C. is not new, but emerging urbanization is creating an urgent need for better control of our living transportation problems.

"The world is moving so fast these days that the man who says it can't be done is being interrupted by someone doing it." *C. Blanketeer*

Commercial Art Design...



The commercial artist is concerned with designing the ordinary items of our daily living such as: furniture, clothing, cars, appliances, packages, posters, television, and stage settings, cartoons, illustrations, greeting cards, textiles, and all forms of advertising.

He must possess a thorough knowledge of the elements and principles of design and be able to sell his product in a highly competitive world. If price and quality are equal, the appearance will determine the consumer's choice.

The layout is the foundation of all commercial art work. Basically this is an arrangement of spaces into a well balanced composition. From this rough sketch ideas become simplified symbols, trademarks, or whatever form the artist has in mind.

The advertising artist must be an expert in lettering, familiar with all forms of the alphabet and capable of producing new formations with words and slogans. Newly developed transfer sheets have minimized the artist's need for doing the actual lettering himself, but he must be knowledgeable and have sufficient skill to be able to letter if necessary.

Fashion illustration is a glamorous commercial art field demanding a thorough knowledge of anatomy and textiles. Another challenging area is that of interior design which also deals with textiles and is closely allied to architecture in using space relationships and perspective.

Commerial art is a many faceted field with opportunities for unlimited design problems. Many artists today are earning a good living in the area of industrial design. Our complicated life today is tied closely to the artist. All around us are examples of the items, objects, tools, and many of the decorative and useful articles designed first by the commercial artist. Life would be drab without their original creations.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- MAKING A LAYOUT
- ADVERTISING DESIGN
- USE OF BASIC MEDIA
- LETTERING PROBLEMS
- FASHION ILLUSTRATION
- FIGURES IN FASHION
- HUMAN FORM IN LAYOUT
- USE OF HEADS & HANDS
- ARRANGING FIGURES
- CREATE VARIETY OF
- TEXTURES NEEDED

ADVANCED ACTIVITIES

- PERSPECTIVE FOR ARTIST
- ADVANCED LAYOUTS
- ADVANCED LINE DRAWING
- TONAL PAINTING
- STUDIO TECHNIQUES
  - MOUNTING ART
  - TRANSFER SHEETS
  - AIRBRUSH
  - RETOUCHING
  - ZIP-A-TONE
  - COPY FITTING
  - RESCALING ETC.

"Industry without art is brutality." *John Ruskin*

Appreciation...
DEVELOPING AESTHETIC AWARENESS

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

COLLECT A VARIETY OF THINGS CHILDREN SHOULD BE AWARE OF FLOWERS, ROCKS, WOOD, LEAVES, NESTS, SEEDS, INSECTS, BUTTERFLIES, SHELLS, FOOD, FRUITS

LIVE SMALL ANIMALS SUCH AS: SALAMANDERS, TURTLES, FISH, FROGS, BIRDS & TAME LIVING THINGS AS: DUCKLING, RABBIT, CHICKS, ETC.

COLLECT PICTURES OF THESE THINGS TO HELP CREATE AN AESTHETIC AWARENESS OF BEAUTY FOUND IN NATURE. CALL ATTENTION TO THE FORM, BALANCE, & DESIGN FOUND.

SCIENCE IS RELATED TO THIS AWARENESS.

COLLECT AS MANY EXAMPLES TO HELP CHILDREN BECOME SENSITIVE TO THEIR ENVIRONMENT.

ADVANCED ACTIVITIES

MORE OF THE SAME

For too long a time, art appreciation in too many schools has been an occasional study of adult-selected reproduction of pictures, considered suitable for each grade level. Understandably, this practice has not always resulted in appreciation. Often the opposite resulted. First, the visual arts were limited to paintings, while other forms were ignored. Secondly, employment of the art elements were overlooked or minimized due to the teacher's lack of knowledge. Thirdly, the learner was given no opportunity for self-identification. Appreciation, therefore, has become little more than the memorization of names, dates, facts, and hero-worship.

For our purpose, DEVELOPING AESTHETIC AWARENESS and DISCRIMINATION will better express our goal than the word: APPRECIATION. Developing aesthetic awareness, implies growth in the ability to see qualitatively as it encourages self-involvement with critical judgment. To be meaningful, learning must begin with the learner, his environment, his interests, and his aspirations. Walt Whitman expressed the importance of awareness in the first lines of his poem:

> "There was a child went forth every day,
> And the first object he looked upon, that object he became,
> And that object became a part of him for the day
> or a certain part of the day
> Or for many years or stretching cycles of years."

Art awareness will sensitize the learner to his environment. As he is guided to see the wonders of nature and of man, the learner is open to perceive the beauty that surrounds him and be inspired by it. Good teachers give the learner adequate time to perceive:

. . . the pattern of flying geese against the chilly morning sky,
. . . the smooth, transparent beauty of fragile blown grass,
. . . the friendly coffee-bacon smell of breakfast in the hills,
. . . the clothesline hung with crystal bead raindrops,
. . . the momentary magic of a snowflake melting on the eyelash.

"Happy people are those who are producing something." *Dean W. Inge*

Appreciation...

DEVELOPING AESTHETIC AWARENESS

Such experience brings beauty within focus and provides a readiness for wider horizons of aesthetic experience.

Good teachers are constantly alert to community resources which can be used for developing awareness in art. Every community has creators: weavers, woodworkers, stitchers, flower arrangers, etc. Every community has interesting architecture; homes, churches, and other buildings which can be studied for their relationship to historic styles. South Dakota is full of Gothic-inspired buildings. While learning about the art of artists of the community, new civic pride and friendship may develop. As a small child builds his tree-house or his sand table community, or as a high school student creates his dream house, each develops an interest in and a responsibility to the architecture of his time. From this involvement, every building he observes will assume a special signficance for him.

If he is to guide the learner effectively, each teacher must develop his own personal sensitivity to beauty. He must remember that all art forms are structured on design elements. He must point out the importance of line, form, space, color, and texture and the principles of their use in visual language. He must realize that it is through organized form that the artist communicates his feelings and aspirations and he must guide the learner to seek the message in the same way. This is necessary if one is to comprehend the message of a work of art.

We have few museums and art galleries in South Dakota, but their absence does not mean our people are entirely beauty-deprived. Growing up in a variety of natural and human beauty, our young people are privileged. As they grow in sensitivity to beauty, they will have much to take to an original work when opportunity comes.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

COLLECT PICTURES OF USUAL THINGS AND PICTURES BY ARTISTS

BRING EXAMPLES FROM HOME FROM TRAVELS & EXHIBIT THEM FOR ALL

CONTACT POTTERS AND PLACE WORK ON DISPLAY OR BRING EXAMPLES OF CERAMICS FROM HOME.

WEAVING EXAMPLES CAN BE COMBINED WITH THE CERAMIC DISPLAYS.

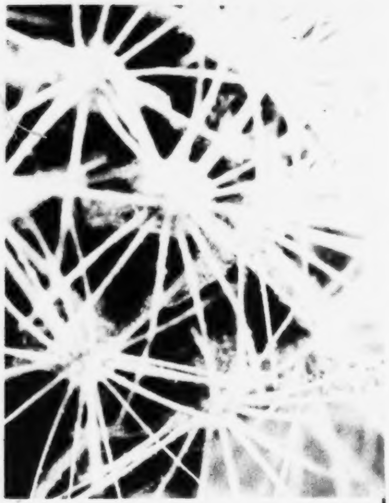
DISPLAY SEA OBJECTS

PICTURE OF THE WEEK

CHILDREN'S WORK IS SELECTED BY GROUP TO ENCOURAGE THEM

ARRANGEMENTS MADE OF FLOWERS AND WEEDS TO DEVELOP AESTHETIC AWARENESS

"Man's mind stretched to a new idea, never goes back to its original dimensions."
Oliver W. Holmes



Appreciation...

DEVELOPING AESTHETIC AWARENESS

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- DISPLAY TECHNIQUES
- HELP CHILDREN SEE THE GOOD IN THINGS THEY VIEW.
- POINT OUT BALANCE, COLOR, ARRANGEMENT, QUALITY OF PIECES OF SCULPTURE AND CERAMICS, PICTURES, AND OTHER MEDIA.
- SHOW CHILDREN WAYS TO MAKE THEIR WORK BETTER FOR DISPLAY
- STRIVE FOR QUALITY
- MAKE USE OF THE SENSES TO CREATE ARTISTIC AWARENESS

ADVANCED ACTIVITIES

- TEACH THEM TO DISPLAY WORK PROPERLY
- MAKE PICTURE MAT
- SET UP 3-D DISPLAY BOXES IN ARTISTIC MANNER
- COLLECT PRINTS OF MASTERPIECES. FIND DIFFERENT ARTISTS OF VARIOUS PERIODS

In our fast moving world, original art forms are within reach of every one. Remember: A work of art is an invitation to a partnership between the artist and the observer with the art object serving as "common ground" or "common bond." The observer must be able to identify with the artist's experience. Harvey Dunn's paintings of South Dakota pioneers help South Dakota people to re-live the joys and sorrows, hopes, and frustrations of the early settlers. They make the history of South Dakota come alive. Likewise, the culture of the Sioux Indian is more easily understood through the messages of Oscar Howe's paintings. Similarly any little girl who has played "make-believe" by dressing up in grandmother's dresses will identify herself with LADY JANE in Bellow's painting.

The classroom should present a permissive atmosphere for growth in aesthetic awareness, and, whenever possible, should be oriented with the world outside. Van Gogh, the man who painted the sun, becomes a friend to every young sun-painter. Color becomes more personal after reading Mary O'Neill's book: HAILSTONES AND HALIBUT BONES. Forms balanced in space provide a good opportunity for the introduction of a Calder mobile. Religious ceremonies of other cultures and areas will effectively motivate the creation of masks on any level and a film on Obratsov's puppets or Chinese Shadow Plays will establish an interest in puppetry as an art form. As young sculptors use wood in organic form, the creations of Moore and Brancusi can take on new significance. We can not justify art education without developing qualitative awareness of art. One is closely correlated with the other.

A good teacher will emphasize the uniqueness of personal expression as he guides the learner to study his works and the works of others. He must show that subject matter is unlimited and media and tools are limited only by the individual ability to conceive new possibilities. Each age and culture must find its own way and erect its own monuments according to the needs of its people and the materials at hand. Art will assist people to live well within their own age.

"Fine art is that in which the head, the hand, and the heart of man go together." *John Ruskin*

Appreciation...
DEVELOPING AESTHETIC AWARENESS

No visual art form is of greater importance than another. Hierarchy of materials and expression no longer exist. Distinction between the fine and minor arts has been shattered by the recognition of today's artist-craftsman whose concern for the aesthetic has moved many so-called crafts into the category of the fine arts. This is especially true of ceramics, weaving, stitchery, jewelry and wood-working. In the final analysis, creativity is the important criteria to all art expression. The teacher must teach each learner to distinguish between creativity and technical skill and between phoney artificiality and honest expression.

Through artistic awareness, life will be enriched. The artist is enabled to see himself in historical perspective through the immortality of his creation. Understanding the art of the past will always open doors to understanding the art of the present. Therefore, we must not ignore the art of history just because it is old. Too, we must not revive it for the same reason. Education in the arts should help us select the best from the art expression of any age. Often our appreciation has completely ignored the arts of the present time.

Today we are hearing much about improving the face of our country. This is good. To attain a more beautiful America we should plant the seed of beauty in our youth and nurture it to fruition. The natural pattern of growth is up, not down. Beauty, or the need of it, can't be legislated. It must begin with our citizenry. The need for beauty must come from the people. Perhaps this is one of the important goals of contemporary art education in our land. Certainly, an orderly, beauty-filled environment will inspire more order and beauty. Experiences in developing artistic awareness and discrimination give quality to living and:

> "These become a part of the child who went forth every day, and who now goes, and will always go forth every day."
>
> Walt Whitman (A Child Went Forth) *The Laurel Poetry Series* N. Y. Dell Pub. 1959

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- SAVE REPRODUCTIONS OF ART AND ORGANIZE
- USE FILM STRIPS AND SLIDES - AVAILABLE NOMINAL RENTAL FEE
- LIBRARY BOOKS USE TO FOSTER ARTISTIC APPRECIATION
- SELECT GOOD ONES MAKE THEM AVAILABLE
- ARRANGE FOR DISPLAYS STRESS GOOD DESIGN
- EXPLOIT THE RESOURCES OF THE COMMUNITY
- MAKE USE OF PRIVATE COLLECTIONS. ARRANGE FOR LOAN EXHIBITS
- MAKE USE OF SCRAPBOOKS AND CREATIVE HOBBIES
- ENCOURAGE PARENTS TO PURCHASE THE WELL ILLUSTRATED BOOKS FOR CHILDREN'S USE
- VISIT MUSEUMS OF ALL TYPES. BECOME AWARE OF SOUTH DAKOTA ARTISTS IN ALL FIELDS OF ART.

"Nothing in nature is more beautiful than one snowflake, but unfortunately they seldom come that way." *Bill Vaughan*

Evaluation-Grading...

SPIRAL OF LEARNING

A CRITERIA FOR JUDGMENT MUST BE DEVELOPED FIRST IN THE CHILD.

EXPRESSIONS GIVE CLUES

- I LIKE WHAT I'M DOING
- THOSE COLORS ARE PRETTY
- WONDER WHAT WILL HAPPEN IF I TRY THIS?
- LET ME DO THAT AGAIN

SELF EVALUATION

BEGIN GROUP ANALYSIS
CONSTRUCTIVE CRITICISM
TEACHER GUIDE ANALYSIS

- WHICH DO YOU LIKE AND WHY?
- WHAT COULD YOU DO TO IMPROVE THIS?
- HOW CAN WE DO THIS IN A BETTER WAY?
- IS THERE ANOTHER WAY?
- IS THIS YOUR BEST?
- ARE YOU SATISFIED WITH WHAT YOU'VE DONE?
- WHO CAN THINK OF OTHER WAYS TO DO THESE?
- IS THIS THE BEST COMPOSITION?
- HOW DO THESE COLORS MAKE YOU FEEL?

A good classroom teacher strives to continually raise the level of a child's achievement and develop in the child a desire to do this. This type of teaching cannot be standardized as it must suit the individual's needs. In the first three grades when a child's ideas come rapidly and do not remain for long, when interest spans are short, and when motor skills are limited, the emphasis is more upon the creative process.

The product at this time is a record of the child's growth, his involvement, his level of development. We do not force adult standards upon pupils at this time. We would almost *never* give failing grades in art since there is no right or wrong way to express oneself. An immature art product reflects the need for understanding of the individual's growth pattern.

Teachers should provide a good climate for work, provide good motivations, introduce orderly procedures to insure good basic foundations on which to work. Permit the child to work independently until he reaches his own stopping point. Teachers should try to stimulate the child's thinking or activate his passive knowledge so that he is able to go on to a new level that he could not have otherwise reached.

Has he gone beyond discussion and used imagination?

Did he initiate and use previously used techniques?

Did he work independently and try to solve problems?

Was he determined, patient, constructive even if he made errors? How did he react to his errors?

Did he try to correct his mistakes or did frustration result?

Did the child evaluate his own growth through personal comparison?

What was his reaction to group analysis, criticism, and group interpretation?

"Only he who can see the invisible can do the impossible."
R. MacArthur

Evaluation - Grading...

✓ Try to accept each child as an individual and grade according to the level of maturity of the child. Example: An immature child should not be failed if he is trying to do his best.

✓ The process of development is more important than stress on the finished product. What happens to the child as he explores, wonders, and creates is far more valuable than the end result.

✓ Grade each child according to his own progress rather than in competition with other students in the class.

✓ Keep up a child's faith in his own ability by being pleased with his work if he has honestly tried hard to express himself. The child's attitude towards work and effort expended are important.

✓ Keep grades a private thing. Do not display art work with the grade showing. Refrain from ribbons or awards that set one child above another below the intermediate level. Display every child's work at some time.

✓ Try to grade according to how well the child expresses his own experience. Often the most creative child will deviate from an assignment just enough to be "different."

✓ Encourage the urge to be an individual. We do not want each child to be a carbon copy of another.

✓ You will find grading easier if you have not used ditto or mimeographed patterns, which limits creativity.

✓ Do not withhold art activities from a child as a punishment for behavior. Avoid last period on Friday as an art time. Use art activity as the need arises.

✓ **Neatness is not always the best criterion for grading.**

SPIRAL OF LEARNING

TRIES EXERTS EFFORT
NEEDS CONFIDENCE
RELIES ON OTHERS
SHOWS INITIATIVE
WORKS INDEPENDENTLY
IS SHY & RESERVED

UNUSUAL ANALYSIS
MEETS REQUIREMENTS
DOES MORE THAN EXPECTED
EAGER FOR EXPLORATION
ATTITUDES TOWARDS OTHERS HARMONIOUS

RESPECTS OTHER WORK
USES TOOLS MATERIAL PROPERLY
WILLING RESEARCHER
STRIVES FOR NEATNESS
IMPROVES ACCURACY
STRIVES FOR QUALITY

NON-COMFORMIST
KNOWLEDGE OF SUBJECT
KNOWS WHAT MATERIAL WILL DO
WILLING TO EXPERIMENT
NOT OVERLY CRITICAL
CARELESS

"Not only is there an art in knowing a thing, but also a certain art in teaching it." *Cicero*

Correlation - Copywork...

SPIRAL OF LEARNING

SOCIAL STUDIES
- DRAWING & PAINTING
- HISTORICAL CARTOONS
- MURALS, MAPS, CHARTS,
- CRAFT MODELS AND COSTUMING

SCIENCE
- DRAWING & PAINTING
- MICROSCOPIC SKETCHES
- ENGINEERING STRUCTURES
- MODELS OF NATURE FORMS

MUSIC
- DRAWING & PAINTING
- ILLUSTRATIONS WHICH INTERPRET RHYTHMS AND DESCRIPTIVE IMPRESSIONS

LANGUAGE ARTS
- DRAWING & PAINTING
- ILLUSTRATIONS, BOOKS,
- MAGAZINE, COSTUMES,
- AND STAGE DESIGNING,
- PUPPETS, BOOKBINDING,
- POSTERS, BOOKLET COVERS

MATHEMATICS
- DRAWING FORMS, SHAPES,
- THREE DIMENSION
- LINE GENERATIONS
- CHARTS, GRAPHS, &
- CONSTRUCTION OF GEOMETRIC FORMS.

The correlation of art with other subject matter can stimulate and enrich the learning situation in both areas. The arts and crafts of past and present cultures give visual proof to historical information. As a meaningful creative activity a correlated art project should provide the opportunity for the student to interpret the correlation in his own way by his own hand. The correlated project should be teacher-directed to inspire a creative response from the student and be designed to provide additional knowledge, in the correlated areas. This gives the students the opportunity to make practical application of the fundamentals of art learned through creative activities in a good school art program.

Areas of correlation may be numerous and varied depending upon the ingenuity and initiative of the teacher. The combination most used is art and social studies. Both programs are interested in information gained or illustrated through the study of historical achievements in arts and crafts. The artist's work and the trends in art have reflected social and moral conditions, religion, politics, exploration and scientific experimentation. **Art must not become so involved in correlation that there is neglect of creative art for art's sake. An art program will be weakened if creative activities are not art centered.**

COPYWORK

Correlated programs can promote false art concepts by encouraging imitation and copywork. This is particularly true in reference to historical materials. Copywork, patterns, ditto work or tracings of another artist's work have little value as art activities. No feeling of pride in personal achievement can come from twenty tee-pees all in a row, all alike, all cut from the same teacher-supplied pattern. He may have followed directions, but he will not have learned to think for himself, interpret information, or to express his understandings.

"Time is the sandpile we run our fingers in." *Carl Sandburg*

The Art Room...

The art program makes use of expendable supplies, many tools and materials. Students need to develop respect for these media and equipment. They must be readily available and if possible be controlled and handled by children. Provision of storage facilities and organizers are essential to efficiency of operation.

Industrial arts people have a slogan — "A place for everything and everything in its place." Art programs could well adopt this idea. With a little planning one can make, have made, or purchase scissor container, ruler, pan and brush holders, paint containers, etc., which makes the storage of supplies easier.

Art rooms should be flexible so arrangements to accommodate varying techniques and processes are possible. Art teachers are concerned with orderly appearance — the art room should reflect this feeling. Clean-up after art activities should be assumed by the children. Work atmosphere must be apparent for the classes which follow. The teachers should be aware of temperature, ventilation, and an aesthetic feeling should permeate the classrooms. Have a beauty corner, a display section for arrangements by children.

Teachers fear having pupils set up displays because they will not satisfy the teacher's standards. Opportunities must be provided to pupils so they, with experience, are able to discriminate good or poor displays intelligently. Pupil criticism can help point out their errors or achievements of display arrangements.

In a creative atmosphere work noises will be apparent as children work independently, individually, or in groups. Sometimes all pupils will be learning technique. When mastered, pupils will want to work by themselves. Opportunities of doing work in what pupils like to do should be provided. Art rooms are laboratories for discoveries, aesthetic learnings, and not always fun.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

VARIOUS KINDS OF PAPER,
PENCILS, CRAYONS, PENS,
TEMPERA, CHALK.
WATERCOLORS, SCISSORS
RULERS, INK, COLORED
PENCILS, 18x18 CUTTER

ACID-RESISTANT SINK,
CUPBOARDS, CABINETS,
TABLE FOR CRAFTS.

ADVANCED ACTIVITIES
ALL OF THE ABOVE AND
THE FOLLOWING:
SKETCHING HORSES
LIGHTWEIGHT BOARDS
BLOCK PRINT PRESS
AND SUPPLIES

COPPER ENAMELING
KILN AND SUPPLIES

JEWELRY AND METAL
WORK EQUIPMENT

WEAVING - STITCHERY
SUPPLIES AND LOOMS

ENAMEL JIG-SAW, SOME
HAND TOOLS, FILES,
AND CARVING TOOLS.

"Equality of opportunity is an equal opportunity to prove unequal talents."
Viscount Samuel - Royale Forum

Room Management...

CHECK LIST

ELECTRICAL OUTLETS
FOR SPECIAL EQUIPMENT

WINDOW SHADES
FOR DARKENING ROOM
TO USE VISUAL AIDS

CONTROL OF HEAT AND
VENTILATION
PREVENT EXTREMES IN
WARM OR COOL TEMPERATURES
AVOID DRAFTS

DISPLAY AREAS
USE DISCARDED MATERIAL
CARDBOARD BOXES, ZIG-ZAG
DISPLAY ARRANGEMENTS AND
FOLDING SCREENS

BEAUTY CORNER
FRAMED PICTURES, FLOWERS,
POTTED PLANTS, ART OBJECTS
AND WEAVING. CHANGE OFTEN

FIRST AID KIT
USE EXTREME CAUTION IF
TOXIC MATERIALS ARE USED
KEEP AWAY FROM THE
YOUNG CHILDREN.

TEACHER'S DESK
PLACE FOR CONVENIENCE
STUDENT CONFERENCES

CREATE an attractive, pleasant work atmosphere. Provide furniture and equipment for general and specific need, arranged functionally.

PLAN flexible work areas — consider activity, space for material, the number of students, proper lighting . . . avoid glare and cast shadows.

PROMOTE work habits that encourage orderliness and cleanliness stress student responsibility for condition of work and storage area.

INSTALL clean-up facilities — preferably sinks with warm and cold water, or pails. Furnish waste paper containers or boxes of adequate size.

PROVIDE storage space for tools and materials, finished and unfinished art work, and display areas.

USE student monitors for distribution, gathering, and display. Rotate so each student feels the responsibility in his classroom.

MATERIALS:

ARRANGE materials and tools in orderly and adequate storage spaces . . . put like materials together . . . store near the work areas.

POST instructional notices to stress use and care of special equipment . . . keep in good condition for safe and effective use.

MAKE materials and tools available for self-service whenever advisable or practical . . . label for ease of identification.

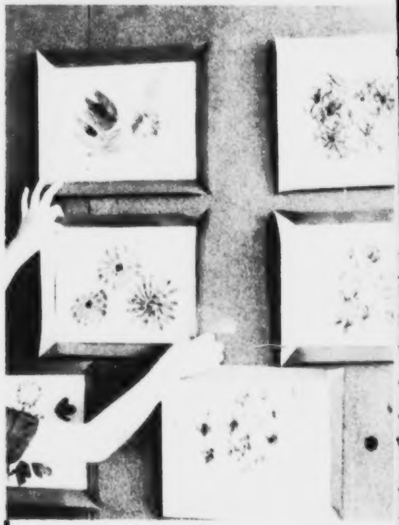
PLACE small objects in compartmental drawers or container to avoid clutter and to aid in selection . . . keep materials clean and neatly stored for prevention of waste.

AVOID use of toxic materials . . . if used have emergency first-aid kit on hand . . . check labels carefully . . . provide good ventilation and storage.

ANTICIPATE material needs — have adequate supply for the year's art program . . . allow a fund for unexpected needs.

"The Artist is in competition with himself only. A bird does not sing beautifully because it is in a contest."
John Sloan

Bulletin Boards...



An art experience, for the student, will culminate in the doing or the making of the art work. Most students experience personal satisfaction when their art work is displayed. A bulletin board provides an area for display of student art work.

The display of the art work will be enhanced if consideration is given to the manner in which the work is displayed. Framed pictures can be set off and look better if colored construction paper or backgrounding is used.

Every child should have art work displayed. Favoritism towards some work of students with exceptional ability should be avoided. Bulletin board displays give children valuable experience in design, composition, arrangements, and organization around central themes. Pupils should help plan these displays.

Pictures can be offset with pins, yarns, strips of paper or other material. Mats can be cut and pictures taped or pasted to the backs.

Bulletin boards may be organized in an informal or formal balance. Formal balance implies that material on one side is equal or similar to the other side. Formal balance is usually methodical, quiet, and peaceful, or dignified. Informal balance makes use of the fact that an intense color area of a smaller size will balance a larger area if the color is less intense. A smaller unusual shape will compensate for a larger, more symmetrical one. Informal balance is usually more active and commanding and is more appropriate for a bulletin board.

Displays can be discussed, planned and carried out in the most effective way to be pleasantly aesthetic. Too often the use of space available is crowded trying to display too much. Simple arrangements are the best. Grouping of areas is also preferred. Changing often to assure all children an opportunity to have their work on display.

SPIRAL OF LEARNING

BEGINNING ACTIVITIES

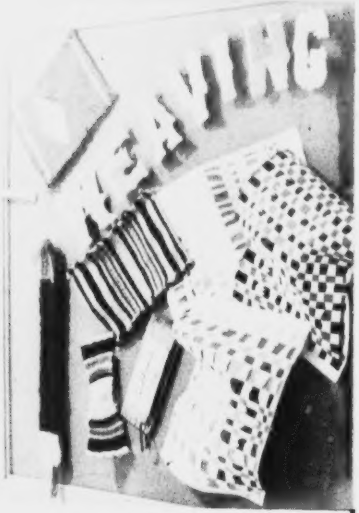
- COLLECT MANY PICTURES MAKE YOUR OWN
- MAKE SIMPLE GROUPS OF ARRANGEMENTS
- TREAT THE GROUP AS A SERIES OF UNITS
- ORGANIZE THE UNITS
- USE YARN TO UNIFY
- TRY HORIZONTAL AND VERTICAL GROUPINGS

ADVANCED ACTIVITIES

- BACKGROUND CONCERN WATCH EYE DIRECTION
- DEVELOP CENTRAL DISPLAY THEME. KEEP SIMPLE
- MAKE YOUR LETTERS
- CUT PAPER FORMS, ODD SHAPES AS BACKGROUNDS
- SMALL PICTURE GROUPS BALANCING LARGE ONE
- CLOTH AND CORRUGATED PAPER BACKGROUNDS

"Many ideas grow better when transplanted into another mind than in the one where they sprang up." *Oliver W. Holmes*

Bulletin Boards...



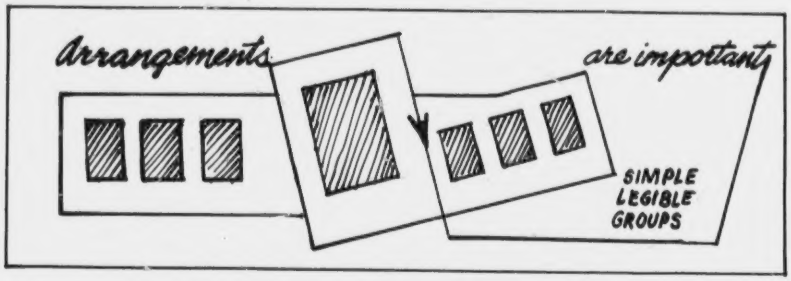
SPIRAL OF LEARNING

BEGINNING ACTIVITIES

- MOUNT DISPLAY WORK USE PAPER, CARDBOARD
- SKETCH ARRANGEMENT PLAN A GOOD THEME
- ARRANGEMENTS AS SIMPLE AS POSSIBLE

ADVANCED ACTIVITIES

- USE BURLAP OR AN UNUSUAL BACKGROUND
- TRY CORRUGATED FREE FORM AS BACKGROUND
- THREE DIMENSIONAL PAPER FRAMING
- THREE DIMENSIONAL LETTERS WITH PINS
- CHICKEN WIRE NETTING AS A BACKGROUND
- DRINKING STRAWS AS LETTERS OR LINES OF DIRECTION
- THREE DIMENSIONAL DISPLAY TECHNIQUES FOR OTHER THAN FLAT WORK.



Uses for the classroom or art bulletin board are many

1. Display informational pictures correlate with other areas
2. Collection of prints, pictures, news and magazine articles
3. Prepare the exhibits for individual or group efforts

Organization of the bulletin board based on good design principles gives the teacher and pupils an opportunity to select, prepare, and make aesthetic arrangements. Bulletin boards create learning situations, to pupils making the arrangements, and to viewer visitors, parents, or pupils. It is most effective if changed often.

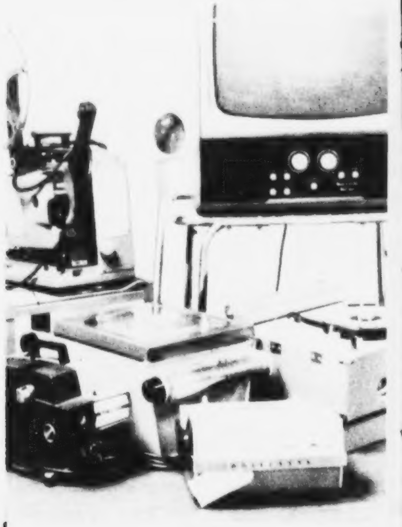
Bulletin boards need to convey a thought, idea or basic theme. The largest piece to be exhibited should be placed in a central focal position, balanced with smaller ones. Keep at pupil's eye-level for ease of observation. Keep them simple, legible and interesting.

Analysis of committee or group display actions, needs to be done to give children opportunity for more effective displays. Bulletin board committees need to be changed often to give every child this valuable experience in arrangement.

SOME TIPS FOR TEACHERS: Margins are important — need balance. Avoid clutter, strive for simplicity; Display fewer items, change often; Try picture of the week approach; Bulletin boards sell your program.

"A picture is worth a thousand words." *Old Chinese Proverb*

Use of Newer Media...



Modern equipment is tough but easy to operate. Let pupils use the equipment. With minimum instruction practically all equipment can be handled by children. "I would like to see more things worn out than rusted out." Dr. D. Colwell

Tape Recorder . . . add headset, a collection of pre-recorded tapes, electric outlet and you have the recipe for excellent self-instruction.

Disc Recording . . . can be checked out. Records include history, music, speech, drama, poetry, oratory, and other subjects.

Film Strip . . . for classes, small, inexpensive, or previewers. One person operation . . . easy to use and are not disturbing to others. Convenient for pupil . . . makes valuable contribution to learning.

2 x 2 Slides . . . flexible, can be assembled in sets, sequence, pupil can expand his experiences. Pupil can view them individually, can move from slide to another at any speed they desire.

The Motion Picture . . . films usually rented not owned, expensive. 8mm Super Loop film cartridge load projector is a possibility within individual use. Easy to handle and operate, with repetitive feature.

Instructional materials are limitless. As more teachers try them many ideas and techniques will emerge. Maps, globes, models, have not been mentioned. Can you imagine examining a globe with a recorded tape . . . A human ear replica or a model of flower parts, etc.

FOLLOW UP SESSION IMPORTANT AFTER USING ANY EQUIPMENT.

Television . . . has not even been mentioned but when video-tape recorders become inexpensive and common, think how video-tape and a T-V set could assist the speech and drama pupil when he can see and hear himself. The reading accelerator or pacer is another device with application to independent study. If we remain open-minded and receptive to change, watch for real developments. Remain adaptable and educational progress will continue.

EQUIPMENT AND MEDIA

PROJECTORS
  FILMSTRIP AND SLIDE

OVERHEAD PROJECTORS
  STILL PICTURES AND
  GRAPHIC REPRESENTATIONS

WALL CHARTS OR POSTERS
AND STILL PICTURES

MOTION PICTURE PROJECTORS
  16mm MOTION PICTURES
  (SOUND OR SILENT)

SINGLE CONCEPT FILMS
  8mm SUPER LOOP SILENT

MAGNETIC TAPE RECORDER
  ¼" MAGNETIC TAPES

RECORD PLAYER
  33, 45, or 78 rpm.
  DISC RECORDINGS
DISPLAY AREA
  3-D MODELS - STRUCTURES

T-V (CLOSED CIRCUIT)
  LIVE PRESENTATIONS
  MOTION PICTURE FILMS
  VIDEO-TAPE RECORDINGS
  AND STILL PICTURES

TEACHING MACHINES AND
PROGRAMMED TEXTBOOKS
  PROGRAMMED MATERIAL

SYSTEM COMBINATIONS
  T-V MOTION PICTURES
  AUDIO RECORDINGS
  LANGUAGE LABS
  STILL PICTURES

"Our task is to help individuals in their identification with their own selves and to stimulate creativeness." *Viktor Lowenfeld*

Useful Materials for Art

One can find many free and inexpensive materials along with many discards of the packaging materials which can enrich and expand any art program, especially a limited budget one.

Use good taste. Be discriminate in your choices. Let P.T.A. groups, or parents, help. Insist materials be clean and in good condition.

Give children the opportunity to organize, identify, and keep material ready in accessible holders.

A. Acetate, acorns, aluminum foil and pans, apple separators

B. Balls, balloons, bamboo, bark, beads, beans, bobby pins, bottles, bottle caps, boxes, brads, braid, buckram, buttons, buckles, bulbs of various sizes, burlap, rubber bands

C. Candles, cans, canvas, cardboard and cardboard rollers, corrugated cards, cartons, catalogs, celluloid, cellophane, celotex, chains, chamois, checkers, clay, clothespins, clothesline, clock parts, cloth, coat hangers, combs, confetti, containers, copper scraps and foil, cord, cork, corn, costume jewelry, corn husks

D. Driftwood, dishes, doilies, tongue depressors

E. Egg cartons, shells, eyelets, embroidery hoops

F. Felt, fishnet, flannel, floor covering, flour, flowers, fruit jars, fur scraps, fence

G. Gimp, glass, gloves, gourds

H. Hats, hat boxes, hair pins

I. Inner tubes

J.-K. Jars (baby food), jugs, keys

L. Lath, lampshades, linoleum, leather, lace

M. Magazines, macaroni, mailing tubes, marbles, masonite, match sticks, metal foil, mirrors, milk cartons, muslin, meat skewers

N. Nails, netting, newspapers, neckties, nuts

O. Oilcloth, orange sticks, ornaments

P. Paper bags, boxes, dishes, cups, towels, pipe cleaners, pebbles, plastic, pocketbooks, potatoes

R. Raffia, reed, ribbon, rings, rope, rug scraps

S. Sand, sandpaper, sawdust, sea shells, sealing wax, seed pods, seeds, sequins, sheepskin, shoe laces, snaps, soap, socks, spaghetti, spools, steel wool, string, stones, sticks (popsicle), straw, sweaters, styrofoam

T. Tacks, tape, thread, tiles, tin, tinfoil, tissue, toothpicks, tooth brushes, twigs, twine

W. Wall board, wall paper, wallpaper paste, wax, wire, wire mesh, wood scraps, wool, wooden beads, wood blocks, wooden crates, wood dowels, wrapping paper, X-ray plates, yarn, etc.

Many merchants in your community will, when they know you want materials they intend to discard, save them if only one asks.

Newspapers - gray cardboard separators

Plumber - copper scraps, tin scraps

Furniture - linoleum samples, rug samples, styrofoam used for packing

Hardware - fluorescent tube separators, styrofoam, wire, nails

Dry goods - ribbon scraps, cloth, boxes, etc.

Grocer - Apple separators, posters, display materials, bags, boxes, plastic lids

Hatchery - Egg cartons, boxes

Lumber Yard or Carpenter - Sawdust, insulation, masonite, plywood, wood, nails, wire, etc.

Clothing Store - Hat boxes, shirt boxes, shoe boxes

Paint Store - Old paint, wall paper, sample books

Dentist or Doctor — Used X-ray plates

Parents - Many items can be supplied from home. Items mentioned in most cases are discards. Plastic coffee lids

Drug Store - Empty bottles (clean), packaging materials

ORGANIZE WHAT YOU GATHER

If not used in reasonable time discard it.

GOOD HUNTING

Finger Paint Recipes

1. ½ cup dry laundry starch 1½ cups boiling water
½ cup soap flakes 1 tablespoon glycerine

Mix starch with a little cold water until dissolved and smooth . . . mix in the soap flakes and glycerine and add dry powder paint for color.

2. 1 pint water 4 tablespoons dry starch

Mix a little water and starch to a paste. Boil pint of water and add to the paste . . . cook slowly until clear . . . cool . . . add powder color.

3. 1 cup starch - 1 pint cold water - 1 qt. boiling water
1 tablespoon soap flakes

Mix starch and cold water till dissolved . . . add quart of boiling water and cook until thick . . . stir constantly . . . add soap flakes and place in jars . . . add color in jars.

4. 1 cup cold water - 4 cups boiling water - 6 tablespoons cornstarch - 4 oz. glycerine - 1 tablespoon alum - color

Mix cornstarch with cup of cold water . . . add 4 cups boiling water . . . cook until thick (stirring) . . . glycerine and alum added after removing from heat. Pour into jars, add powder paints. FOR ROUGH PAPER.

5. 6 cups cold water 1½ cups wallpaper paste
½ cup soap flakes oil of cloves or wintergreen

Pour 1½ cups wallpaper paste into 6 cups water slowly while mixing and add ½ cup soap flakes. Add preservative, either oil of cloves or wintergreen. For color add powder paint. Makes large quantity.

6. 1 lb. box gloss starch - 1 cup soap flakes - 4 qts. water
½ cup talcum powder and powder paint

Mix together in a kettle to cook until clear. Add the preservative - oil of cloves or wintergreen, and add powder paint. If fragrance is desired, add cologne.

7. 1½ cups laundry starch - 1 qt. boiling water
1½ cup soap flakes - ½ tablespoon powder paint

Make paste from starch and cold water . . . add boiling water and cook until mixture is clear, stirring well, prevfent lumping. Stir till evenly distributed. Add paint into mixture, place in ½ pt. jars. (8 needed)

Modeling Mixtures

1. ⅔ cup salt mixed with ½ cup flour, add ⅓ cup water mix to soft dough . . . color is added to dry ingredients . . . mix can use vegetable coloring or dry powder paint. Use like clay.

2. Mix a cup of powdered asbestos with teaspoon of powder paste plus enough water to make soft dough . . . Use as clay . . . dry . . . paint with tempera or enamel.

3. Mix 4 tablespoons salt and 2 tablespoons cornstarch. Pour 4 tablespoons boiling water over this and stir till smooth. Place on stove, stir till mixture forms small ball in pan . . . knead, wrap in wax paper . . . place in closed jar to keep moist till needed.

4. Make a smooth paste with 6 tablespoons flour and 3 tablespoons water. Put 4 tablespoons salt in a pan over low flame till it snaps and crackles, stir constantly . . . stir hot salt into flour paste . . . knead till smooth. Store in covered jar. Can be painted, varnished, etc.

5. Put equal parts of sawdust and flour in a pan. Add enough boiling water to make soft dough. Stir rapidly as you add water . . . good for puppets parts and simple modeling.

(The above modeling recipes from "How to Do It Stories" Denver Public Schools, 1956)

6. 2 parts table salt mixed with 1 part flour. Mix . . . add water to a dough-like consistency . . . if color desired add dry powder or food coloring . . . break off in small pieces and form into beads . . . pierce with toothpicks and allow to dry. Bead formula for inexpensive jewelry or relief maps.

7. 2 cups sawdust - 1 cup Plaster of Paris
½ cup wallpaper paste and 2 cups cold water . . . the material should be shaped into a form - like milk cartons and allowed to dry before carving . . . carton is cut away . . . use knife . . . a soft carving material.

Carving Mixes

1. 2 parts vermiculite, 1 part sand, 1 part cement or plaster. If milk carton is plastic coated apply coating inside carton with wax or vaseline. Pour mixture into carton. Easy to carve.

2. 2 parts vermiculite mixed with 1 part of Plaster of Paris (dentist or lumber yard or hardware store for the builder type.) Pour mixture into old milk cartons. Allow to dry, cut away after mixture dries . . . heats when setting . . . carve into forms.

3. Modeling cement . . . mix 1 part Portland cement with 1 part asbestos cement and 1 part powdered clay, sieved . . . mix with water till putty-like . . . used quickly after it sets you shall have to carve it . . . form shapes and carve.

4. Plaster of Paris combined with equal parts of water. Pour cold water into old containers, add plaster gradually, stirring as it is added till it begins to thicken . . . pour into milk cartons . . . allow to set . . . cool . . . remove . . . carve.

5. Check lumber yard for Grill Block $.50 Block
Featherstone 25 lbs. for $5.00
Inexpensive carving block 20 lb. (above)
Galesburg, Illinois, P.O. Box 1267 Zip 61401

6. Extra soft carving material for younger children. Plaster of Paris, add 1 part baking soda to 20 parts of plaster . . . soda causes plaster to bubble, creating a very porous material . . . can be carved easily.

7. 2 parts cement, 4 parts zonolite
1 part sand, 3 parts zonolite
2 parts plaster, 1 part sand, 3 parts zonolite
2 parts sand, 2 parts cement, 4 parts zonolite
1 part sand, 1 part cement, 1 part Plaster of Paris and 4 parts zonolite
Above mixtures are variations of textures.

Paste Mixtures

1. Mix to a smooth paste 1 cup flour with cup cool water. Add 3 cups boiling water, let mixture boil till thick. Put through sieve. To keep, add teaspoon alum or oil of cloves.

2. ¾ cup water with 1 cup flour . . . mix in a double boiler . . . gradually add cup water . . . cook, stir constantly . . . add teaspoon of boric acid or oil of cloves or ½ teaspoon powdered alum.

3. Mix cup flour to smooth paste with cup of cold water, add 3 cups boiling water . . . cook till thick . . . strain, add teaspoon alum to keep from hardening. 5 drops wintergreen gives pleasant odor, keeps paste sweet longer.

4. Mix 4 cups flour with 2 cups cold water to smooth paste . . . add 4 cups boiling water, cook till thick . . . add 3 oz. glycerine. Strain, add tablespoon alum . . . add 8 drops of wintergreen or peppermint . . . pour into jars.

5. Mix 4 heaping tablespoons flour in enough cold water to make a creamy mixture . . . add water, a little at a time, till no lumps . . . set over low fire, stir constantly till thickened, well boiled. Recipe makes quart of paste, jelly-like consistency when cool . . . ferments easily — slow drying.

6. Library paste. Mix 2 tablespoons minute tapioca, 3 tablespoons sugar, 1 teaspoon vinegar, pinch of salt, with 1 cup boiling water. Cook in double boiler till thick. Ready when cool . . . store in covered jars in cool place.

7. ½ cup flour, sifted, to 2 cups cold water . . . add slowly till smooth paste is formed . . . stir. Cook slowly till clear . . . use low heat.

8. Pour 5 cups boiling water into paste mixture of cup flour, 2 teaspoons alum, 3 drops oil of cloves.

Fixatif Sprays

Fixatifs help preserve the surfaces from smearing and rub offs. May be applied with insect sprayer, mouth sprayer, atomizer . . . for use on charcoal, chalk, pencil.

1. Dissolve Gum Arabic to the consistency of thin cream, and use as above.
2. Mix 6 parts of methyl alcohol with 1 part shellac. (Clean after using.)

3. ½ gallon of alcohol with 2 oz. paste mix and use as above.
4. Mix 1 cup warm water with 2 tablespoons of white glue . . . if quantity not sufficient, double or triple quantity.

5. 2 parts denatured alcohol, 1 part white shellac. Shake well before using. Clean spray equipment after using . . . will clog.
6. Buttermilk thinned with water until a spray consistency has slight sour odor.

7. Hair spray works well . . . use in ventilated area . . . Caution children away from spray stream . . . Precaution — inflammable.
8. 1 part clear lacquer, 2 parts lacquer thinner. Precaution — mixture inflammable.

9. 2 oz. gum arabic dissolved in hot water overnight and used next day . . . moisten surface of paper with solution, allow to dry, then sketch chalk picture. (from American Crayon Company)

Look for a large box, not too deep, for placing pictures in to be sprayed . . . keeps the spray from going over everything . . . Ventilation important on many sprays . . . Experiment for best distance. 1 foot good . . . try for even spray.

Papier Mache Mixes

French term for mashed or pulped paper. Used for modeling material, inexpensive . . . has high shrinkage.

1. Papier Mache pulp to make several small figures. Tear newspapers into small bits. Place into pail, cover with water, soak overnight. Squeeze out soaked paper. Can be strained through sieve . . . add paste to form adhesive mass. Model as clay — dry.

2. 1 part clay powder with 1 part calcimine, 2 parts water mixed to form a thick paste . . . knead in torn pieces of paper. Form like clay . . . allow to dry . . . paint after drying . . . preserve with shellac.

3. Tear newspapers into long strips, ½ to 1 inch width . . . dip strips into prepared mixture. Wheat paste need not be too thick . . . place strips on prepared form to make thickness of several layers . . . allow to dry . . . finish with coating of paper towels . . . smoother to paint.

4. Paint coating wallpaper paste on sheet of newspaper . . . lay sheet on top, press down firmly, repeat 6 to 8 times . . . when leathery, paper is still pliable . . . cut and form into shapes . . . allow to harden . . . complete by painting or other forms of decoration.

Forms to be made for use in papier mache work can be wadded newspaper tied . . . or rolled pieces of paper tied in place to form an armature . . . balloons can be used to shape forms . . . Pre-designed clay forms also used.

Bowls from home, with gently sloping sides, can be used as a basic form . . . so coatings can easily be slipped off. Bowls make funny hats. Excellent to use where children need modeling experience where limited budgets exist.

Miscellaneous Formulas

PARCHMENT PAPER . . . Brush surface cream manila paper with burnt linseed oil, brush back with turpentine. Allow to dry.

TRANSLUCENT PAPER . . . 2 parts turpentine, 1 part linseed oil . . . brush or wipe the mixture on paper and allow to dry.

SAND STUCCO . . . a little fine sand mixed into tempera paint when a textured roughness desired . . . settles out . . . stir often . .

PLASTIC FOAM . . . 6 tablespoons plastic starch, 1 cup dry detergent, add powder color . . . mix water to creamy consistency . . . for Christmas ornaments.

WOOD STAIN . . . rub wax crayon up and down the wood grain . . . polish with cloth slightly saturated with turpentine.

PAINT FOR GLOSSY SURFACES . . . liquid detergent or few drops glycerine mixed with tempera paint. Sticks to plastic, aluminum foil, etc.

SILK SCREEN PAINT . . . add powder tempera to bottled cornstarch, mix to creamy consistency . . . wheat paste is used in a similar way to starch.

CRINKLE PAPER . . . wet piece wrapping paper both sides, paint dabs of color, crumple, open, let dry . . . repeat and dry . . . press with warm iron.

SYNTHETIC OIL PAINT . . . add dry color to smooth wheat paste . . . apply with stiff brush.

EASEL PAINT . . . Mix tablespoon cornstarch and 2 tablespoons powdered detergent with tempera paint . . . add water, mix thoroughly . . . doesn't run or drip.

SOAP FLAKE SNOW . . . Use Lux or Ivory Flakes, add small amount boiling water, beat with electric mixer or hand beater to make fluffy snow.

HOBBY CRAFT PASTE . . . ¼ cup cornstarch and ¾ cup water, 2 tablespoons corn syrup, 1 teaspoon vinegar in medium sized saucepan. Stir constantly over medium heat. Stir another ¼ cup cornstarch into ¾ cup water till smooth . . . immediately stir, a little at a time, into the thickened mixture . . . stir smooth each time . . . oil of wintergreen to preserve — thickens on cooling.

Odds and Ends

PASTING TIP . . . paste should be applied to the smaller of two pieces to be pasted . . . too much paste will cause smearing and cause spots or discoloration.

PAINT OVER WAX or plastic surfaces . . . just add a few drops of detergent to the paint mixture . . . will stick to wax, plastic, etc.

STRETCH YOUR PAINT . . . tempera liquid paint is thick, highly pigmented . . . works best when it is mixed, and diluted almost half and half.

PRESERVING FALL LEAVES . . . place alternate layers of powdered borax and leaves in a box . . . the leaves must be completely covered . . . allow to stand for four days then shake off excess borax and wipe each leaf with a liquid floor wax. Leaves can be pressed with warm iron.

LIQUID STARCH FINGER PAINT . . . pour tablespoon liquid starch in the center of a sheet of dampened paper . . . add small amount of powder paint . . . shaker cans or salt shakers are convenient to use. Work the color and starch together and spread. This method one need not prepare large quantity and children do the mixing.

CHRISTMAS SNOW . . . 2 cups of water, 4 cups soap flakes . . . mix with electric mixer or beater to make thick suds . . . spoon soap suds on to tree . . . they dry quickly, remain indefinitely. Sprinkle extra soap flakes on the snow before set.

From Fargo Public School Guide, Fargo, North Dakota

MARBLE PAPER . . . shave scraps of old crayons into small amount of turpentine . . . allow to soak till crayon dissolved . . . pour mixture on top of large shallow cookie pan filled with water. Lay paper on top of this mix carefully and remove . . . dry . . . mixture can be stirred for beautiful effects. Enamel paint can be used in a similar manner.

THANKS TO . . .

Des Moines Public School Guide 1956
Denver Public School Guide
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Many sources unknown

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Glossary of Art Terms...

ABSTRACT — A simplified version, not realistic or representational.

ACCENT — The specific areas within a composition which are given greater emphasis by the use of more intense tone, size change, or other means which exaggerate these specific parts.

ACETONE — A solvent for plastic.

AESTHETIC — Pertaining to the study of aesthetics; the science or theory of the beautiful.

AGGREGATES — A medium for building, carving, or moulding made from a combination of various materials.

AQUEOUS — A solution containing water.

ARCHITECT — One skilled in building design art.

ARMATURE — Frame work of wire, wood, or other material used to support modeling substances such as clay, papier mache, or plaster.

ARTIFACTS — Products of human workmanship which usually constitute an element of material culture or product of human primitive art.

BALANCE — A visual impression of equilibrium between all interactive parts in a work of art.

SYMMETRICAL — Formal, equal distribution of art elements.

ASYMMETRICAL — Informal, unequal distribution of art elements, visually pleasing.

RADIAL — equalization from central point as in a wheel.

BALSA — A strong, light wood available in strips or blocks for carving, construction, model or collage making.

BAS RELIEF — Sculpture in low relief, projection from background is slight.

BAT — A flat slab of Plaster of Paris used in clay modeling.

BATIK — A method of creating colored designs on fabric by coating areas not to be dyed with wax.

BIT — A tool used with a BRACE for drilling holes.

BLOCK PRINT — A print from engraved wooden plate.

BRAD — A thin nail with small head; finishing nail.

BRAYER — A hard rubber or gelatin roller used in printing spread ink over a surface.

BURNISH — To make smooth by rubbing or polishing.

BUTCHER PAPER — A glossy paper which usually comes in rolls, for murals.

CANVAS — A coarse, heavy cloth of hemp, linen, or cotton used as a surface for oil painting.

CALLIGRAPHY — Relates to beautiful writing and fine brush work, particularly applicable to Chinese and Japanese.

CARTOON — A preliminary drawing for a mural, comical drawing.

CARVING — The act of designing by cutting away parts of a surface of stone, wood, plaster, soap, or similar material.

CENTER OF INTEREST — That part of a composition which is the first to attract attention; the part which the artist wishes to express most forcefully. This can be done through color, size, arrangement, etc.

CERAMICS — A term used for objects which are made of clay and fired in a kiln.

CHISEL — A tool used to cut wood, stone, or metal.

CLAY TERMS:

BISCUIT — Unglazed pottery first firing.

ENGOBE — Colored slip which produces non-glossy, non-running finish on pottery.

GLAZE — Transparent or opaque surface finish applied to ceramics or metal.

GREEN WARE — Unfired pottery or ceramics.

KILN — Gas, electric, coal, or other heated furnace or oven for firing ceramics.

SCRAFITTO — Scratched design through engobe coated clay surface.

SLIP — Thin, watery, clay used as a paste or poured.

WEDGE — Process of cutting and pounding to remove air bubbles from clay.

COLLAGE — A method of pasting various materials such as cloth, wood, paper, and scraps, into visually pleasing form.

COLOR, CHROMA or **HUE** — Diffused wave lengths reflected on a surface.

There are two color mixing processes:

ADDITIVE — Light interacts with light to form other colors. When additive primaries are mixed in appropriate amounts, they produce white light.

SUBTRACTIVE — Light interacts with colorant (ink, paint, dye, filter, etc.), which filters out, or subtracts some of the colors from the white light leaving the other colors to be seen by the eye. When mixed in proper proportions, they make black.

COMPOSITION — The arrangement and organization of parts in a unified, satisfying, whole.

CONTINUITY — The rhythmic relation of parts of a design to each other to give a sense of unity.

CONTOUR — A line drawing showing external characteristics or boundaries of a shape or form.

CONTRAST — To show a noticeable difference when compared side by side.

COPING SAW — A small hand saw to cut circular or irregular shapes in plywood, masonite, upson board, or heavy cardboard.

CONVENTIONAL — A stylized treatment of natural forms conforming to accepted standards of appearance.

CROSS-HATCH — To shade with crossed series of parallel lines.

DAMP BOX — A zinc lined, tight box having plaster bottom and shelves which hold moisture to prevent stored clay or unfinished clay pieces from drying out.

DECOUPAGE — The art of decorating surfaces with papers and cut out pictures. The decorated surface is usually varnished for protection.

Glossary of Art Terms...

DESIGN — A skillful ordering and building of artistic thought to make a pleasing visual expression with art media.

ELEMENTS — Line, form, space, texture and color.

PRINCIPLES — Balance, harmony, emphasis, variety and unity.

DIORAMA — A stage-like scene in third dimension.

DISTORTION — Alteration of natural shapes and surfaces of a form.

DOWEL — A thin pole of wood available in graded diameters.

ELEVATION — A drawing showing the sides of a building not in perspective.

EMBOSSED — Patterns in relief which can be seen as well as felt.

EMPATHY — The projection of one's personality into the object of contemplation, a feeling into.

ENCAUSTIC — A process of painting using wax colors fixed with heat.

ENGRAVING — The process or product of incising metal or other surface with a sharp tool.

ETCHING — The process or product of engraving a design on a copper (zinc) plate by means of acid. From this a "print" is made.

FIXATIVE — A thin varnish spray used to keep a drawing from smudging.

FOCAL POINT — A point or spot of interest where the observer's eye rests; a point of conversion.

FORM — The finished art product as it appears after the art elements have been arranged. A sculptured or three dimensional shape.

FORE-SHORTENING — The apparent visual compression or distortion of forms to indicate depth in space.

FREE FORM — A shape with no fixed or rigid boundary.

FRESCO — A painting on wet plaster in which the pigments become incorporated with the plaster.

FRIEZE — A continuous pattern (usually ornamental) band or trimming; sculptured or painted.

GENRE' — Compositions which emphasize themes of domestic everyday life.

GESTURE — A scribble drawing rapidly done to depict the action of an object.

GOUACHE — Referring to the process of painting with opaque water colors.

GOUGE — A chisel made with a groove down its center and used for scooping or cuttting a groove.

GRAPHIC ARTS — Drawing, painting, printing. Arts which pertain to representation on a flat surface. (Including lettering, posters.)

GROG — Previously fired clay bits added to plastic clay to keep it from sagging while moist, to keep it from warping while firing, and to add decoration when added to clay of another color.

GROUT — Cement-like substance (marble dust) used to fill spaces in mosaic.

HARMONY — Occurs when all the art elements have been organized into a visually pleasing relationship.

HAPTIC — Type of art expression as a result of an individual's body sensations and subjective experience which involves emotional feeling.

HIGHLIGHT — The lightest spot in a drawing or a painting. A spot or spots produced by the reflection of light.

HORIZON LINE — An imaginary line at the eye level of the observer where sky and earth seem to meet.

ILLUMINATION — Brilliant colors, miniature designs that adorn books, manuscripts, and letters.

ILLUSTRATION — Referring to an art product or process where story content is evident.

ILLUSTRATION BOARD — Heavy cardboard, white finish, used for posters, etc.

IMPRESSIONISM — A style or movement in art to portray effect or "impression" received at first glance. Painting rendered in broken color technique.

INCISED — To cut into or carve a design below the surface level.

INTAGLIO PRINTING — The opposite of relief. Produced from engraved or incised surface.

INTEGRATION — Linking an art experience to another subject area in a curriculum. The mingling of design elements for unity.

IN-THE-ROUND — A free standing three dimensional object to be viewed from four sides.

LEATHER HARD — Clay that has dried sufficiently so that it will not bend but has enough moisture in it so that it will not crumble.

LINE — A mark made by a moving point.

LIP — The top edge of a vase.

LITHOGRAPHY — A process of printing from a stone or prepared metal plate involving the use of a grease crayon and ink.

LOST WAX PROCESS — A method of casting in metal those objects which have been made from clay or other plastic material.

LOWER CASE LETTERS — The small letters.

MASS — A combination of forms within a work of art to make a larger body.

MARIONETTE — A string puppet.

MAT — The surrounding area between a picture and frame.

MEDIA — Art materials. (singular) MEDIUMS.

MOBILE — A hanging, three dimensional design which has moving parts.

MODEL — A miniature reproduction of a form.

MOLD — A hollow shape made of plaster, metal, wood, or plastic in which objects are cast or formed.

MONTAGE — The gluing together of parts of representational pictures to form a new pictorial image.

MOOD — Style or manner giving a dominant emotional character.

MOSAIC — An inlaid design of glass, tile, or other material (tesserae) planned by juxtaposition.

MOTIF — Center or dominant theme or feature.

Glossary of Art Terms...

MOVEMENT — The action lines within an object. The sight direction in a composition as implied in related actions within objects and from object to object.

MURAL — A large wall painting telling a story.

NATURALISTIC — Resembling nature.

NON-OBJECTIVE — Art expressions of pure design form with no relation to natural objects.

OIL PAINT — A pigment in linseed, poppy, or nut oil.

OPAQUE — Heavy or non-transparent.

ORGANIZATION — Relationship of parts to each other and to the whole.

ORIGAMI — Japanese art of paper folding. Forms hold their three dimensional shape without use of adhesives and no cutting is involved.

OUTLINE — A line used to describe the contour shape of a form.

PAPIER MACHE — A process and a product of paper (newspaper) and paste or sizing.

PARALLEL — Equally distant lines, surfaces, or directional lines.

PASTELS — Ground pigment with gum arabic in chalk-like form. Colors often tinted in appearance. A light value.

PATINA — A film produced by oxidation on copper, brass, bronze, and other material. Mellowing or softening by age.

PATTERN — An area or group of recurring lines, shapes, colors, textures within a design or composition.

PERSPECTIVE — The art of creating an illusion of depth on a two dimensional surface. A visual method of drawing objects as they appear to the eye.

PICTORIAL — Natural objects arranged according to the art fundamentals to produce a picture.

PICTURE PLANE — The surface on which the artist draws or paints.

PIGMENT — Powder or substance prepared by mixing with liquid as a paint.

PLANULAR — A designed composition constructed of two dimensional planes.

PLASTER OF PARIS — A modeling material which is a composition of gypsum used for molding and casting and making pottery molds.

PLASTIC — Natural and synthetic materials capable of being molded or modeled.

PLASTICINE — Modeling clay which has been mixed with oil to prevent hardening.

PORTRAIT — Likeness of a person.

POSTER — An artistic eye-catching notice made to sell an idea or an event.

POSTER PAINT — Opaque paint in dry or liquid form suitable for classroom use.

POTTERY — Pots, dishes, vases, etc., made from clay and shaped while moist and heat hardened.

PROPORTION — May refer to size relationships within a work of art or may refer to quantities of tones or colors.

PUPPET — A small animated figure.

RADIATION — Divergent lines, forms, or colors emanating from a central point of interest.

RAFFIA — A palm fiber used in weaving, available in many colors.

REALISM — The representation of things as they appear in natural form.

RELIEF — A construction where patterns project above a background surface.

RENDER — To depict in an art form, material, technique or process.

REPOUSSE' — Metal work in which the design is hammered into relief from the reverse side.

REPRESENTATION — The visual expression of an idea, emotion, or situation.

RESIST — The use of wax or grease to cover or protect areas from the application of color washes or dyes.

RHYTHM — An ordered movement made by the repetition of pictorial elements.

SATURATION — Greatest intensity of a color.

SCORE — To mark with an edged tool.

SHADE — A color value achieved by adding the complement of black to a basic color.

SHAPE — Geometric or free-form in dimension defined by outline or contrast.

SILHOUETTE — A profile portrait of any form showing the shape as a solid mass contrasting with background color.

SILK SCREEN — Method of reproduction, color forced through silk or other fabric.

SKETCH — A rough outline of an object or a scene. A free drafting of an idea or design.

SOLUBLE — Capable of being dissolved or liquified.

SPACE — The amount of surface upon which a design is placed or the air mass within which a design is placed.

SPECTRUM — Band of colors derived from wave lengths of light when seen through a prism or other reflective material.

SPLATTER — A texture shading achieved by flicking paint from a brush to cover a surface with irregular drops.

STABILE — A space design which has no moving parts, usually mounted on a base.

STILL LIFE — A combination of objects such as books, fruit, vases, etc., that the artist arranges and uses as subject matter.

STIPPLE — A texture shading or broken color achieved by pressing the tip end of a drawing or painting tool to the surface. A flat or square tipped brush or textured materials, such as, a sponge, or crumpled piece of paper may be used.

STYLE — The manner in which the individual artist approaches his work; his particular manner of working, applying to a surface pigment, carving, modeling, weaving, etc. How an artist works.

SYMBOL — Something which stands for or represents an actual image or idea.

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Glossary of Art Terms...

TABBY WEAVE — Plain weave; two sets of threads at right angles to each other.

TACTILE — Referring to the sense of touch.

TEMPLATE — A pattern [illegible] used as a guide to the form in ceramics or in other art forms.

TERRA COTTA — An unglazed, earth-colored clay.

TEXTURE — The surface quality of an object or paint.

TEXTILE — A woven fabric.

THREE DIMENSIONAL — A form having height, width and depth in space.

THUMB-NAIL SKETCH — A small drawing of a design or picture.

TINT — A color value achieved by mixing the color into white.

TONALITY — The overall quality of painting developed by a predominance of one hue or closely related hues.

TONE — A color value achieved by mixing color with white plus its complement or black.

TOOLED — The process of pressing design pattern onto the surface of a softened material.

TOXIC — Poisonous.

TRADITIONAL — Anything that has come down through the past.

TRANSLUCENT — Semi-opaque; partly transparent.

TRANSPARENT — Having the quality of transmitting light through the substance so that objects [illegible]

TWO DIMENSIONAL — A form having height and width in space.

UPPER CASE LETTERS — The capital letters.

VERMICULITE — Mica, an insulating material, used as an aggregate in Plaster of Paris carving blocks.

VISUAL — That which can be seen. Used in art in reference to visual minded people who observe objectively.

VITREOUS — Refers to high fire ceramic ware [illegible] The material is glassy and non-porous.

VOLATILE — Evaporating readily.

WARP — Threads with which a loom is strung; lengthwise threads.

WASH — A watered down pigment, the transparent [illegible]

WEFT (WOOF) — Threads used in weaving at right angles to the warp.

WOODCUT — Design cut in wood. A graphic print from a block wood print.

Modeling Clay . . .

Modeling is a process where three dimensional forms are constructed by manipulation of pliable plastic or plastic-like materials.

CLAY

Beginning clay experiences in modeling are manipulative activities closely related to the exploratory scribbles and blobs of beginning drawing and painting. The plastic material encourages squeezing, punching, gouging, rolling, and other manipulative motions to develop muscular control and coordination.

- Parts, planes, and appendages of objects and figures can be pulled, squeezed, and shaped out of a single ball of clay. The technique is usually chunky, bold, and expressive with little attention to detail.

- Another manner of modeling is to form all parts separately and to weld them together.

  Control is used in the shaping of parts and the description of detail.

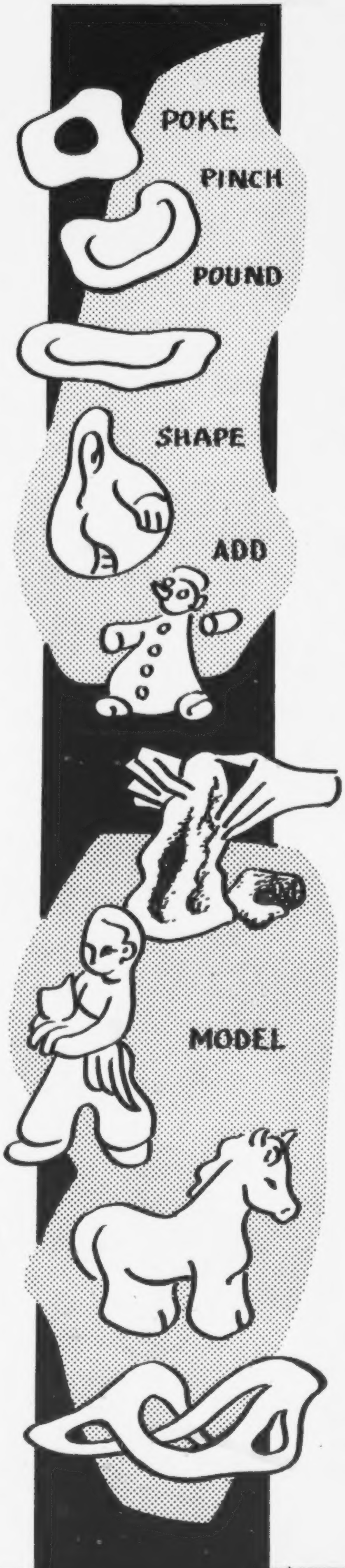
- More advanced activities may combine the two approaches.

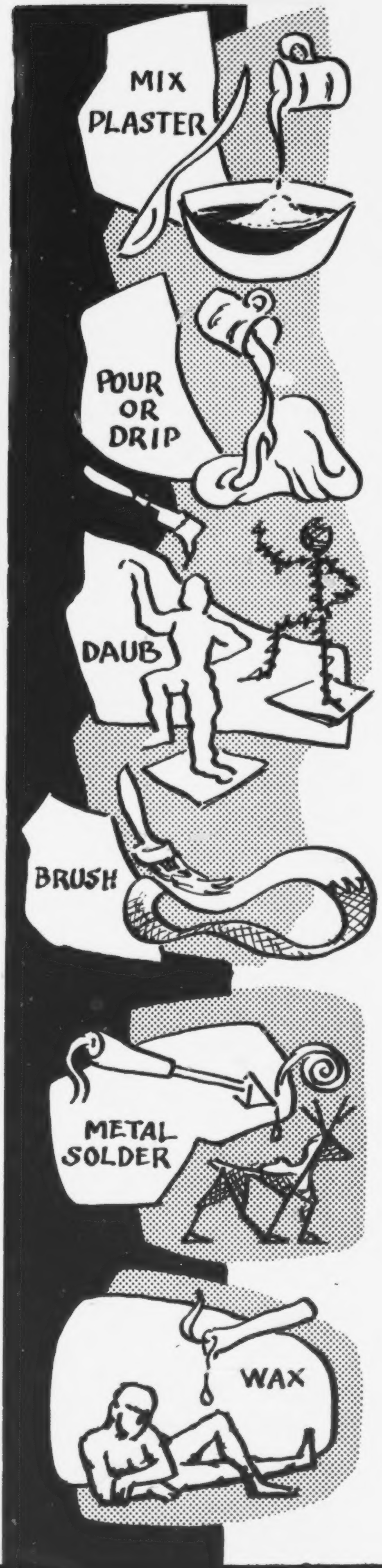
  The piece can be brought to a high finish by smoothing and modeling with fingers and wooden sticks or by scraping or texturing with wire cutters and scrapers.

Non-hardening clays are excellent and economical for beginning experiences. The material may be re-used as much as desired.

Self-hardening, oven fired, and kiln fired clays may be re-used by storing in a damp box until needed.

Advanced activities in modeling are more rewarding when the piece can be dried or fired and painted or glazed as a finished product.





Modeling - Plaster, Metal, Wax . . .

PLASTER OF PARIS

Mix a small amount of plaster that can be applied before the material begins to set-up. A few drops of vinegar will slow the setting-up process.

Build or model by adding layers with a brush or spatula or by pouring or dripping.

In-the-round objects may be built from a base of hardened plaster or from a wire or cardboard armature as a skeletal structure of the object.

Reliefs may be built on a plaster slab or cardboard base. Three dimensional shapes may be glued to the cardboard to establish design and to aid in producing thickness of form.

A commercial product which is a cloth impregnated with plaster is available. It may be dampened and shaped without a core base or it may be draped over or wrapped around a mold or wire armature.

The surface of the dried plaster may be left rough or it may be sanded smooth.

Decorative or descriptive touches may be carved or scraped into the dried piece.

METAL

Liquid metals may be dripped, poured, or applied with a brush or spatula to a solid armature.

Though it must be used with caution, lead is the easiest metal to use because it melts at low heat. Lead in the form of solder may be used with a soldering iron. Some carving and scraping may be done for descriptive details.

New commercially prepared liquid metals that air dry are useful because they may be worked without heat. They are slower drying than other metals and modeling effects can be more controlled.

WAX

Paraffin, beeswax, scraps of wax crayon, and candles may be melted and used for casting or drip modeling. Drip wax over an armature or solid base. A soldering iron gives controlled heat for wax dripping.

Use hot wax with caution.

Modeling - Clay Preparation . . .

Commercially prepared clay may be obtained in various types and forms — self-hardening, sun fired, kiln fired, non-hardening; moist or dry powdered.

Clays that are self-hardening, oven fired, or sun fired produce objects of little durability. Such objects can be painted as decorative pieces not subject to excessive handling.

Non-hardening clays are plastic in nature and may be re-used as often as desired. They provide manipulative experience for beginners in modeling. Such clays are especially good for mold making as a base form for plaster mold or papier mache modeling.

Fire clay for kiln firing affords the richest experiences in modeling. It can be adapted to a greater number of end products because of its durability after firing.

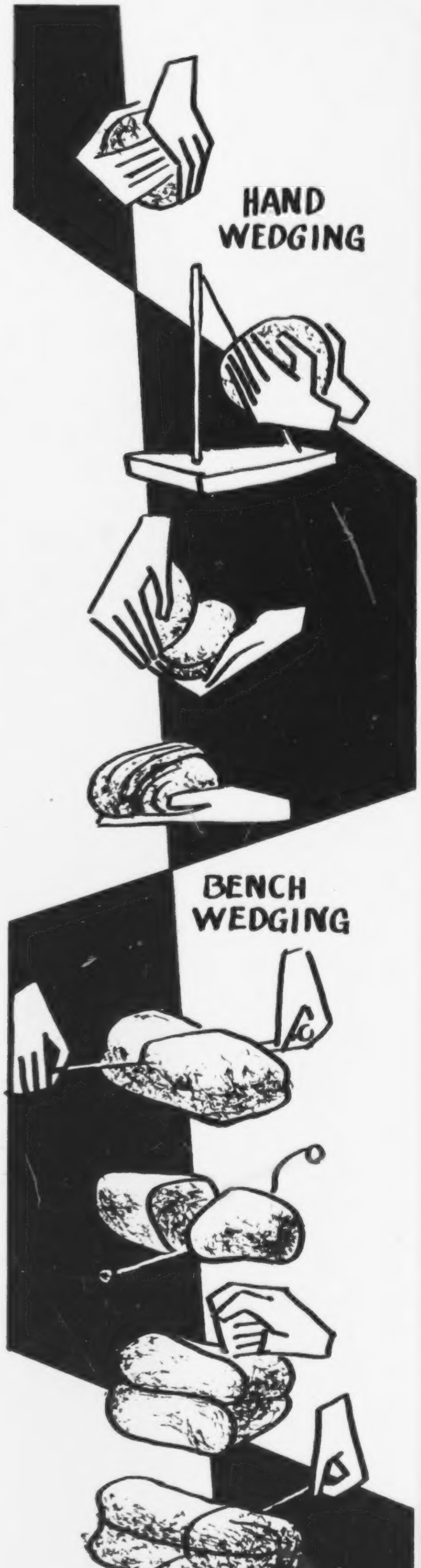
The clay may be purchased moist, ready for use; or dry. The dry clay is more economical though it takes preparation time before use. The clay must be mixed with water, allowed to age, and then wedged.

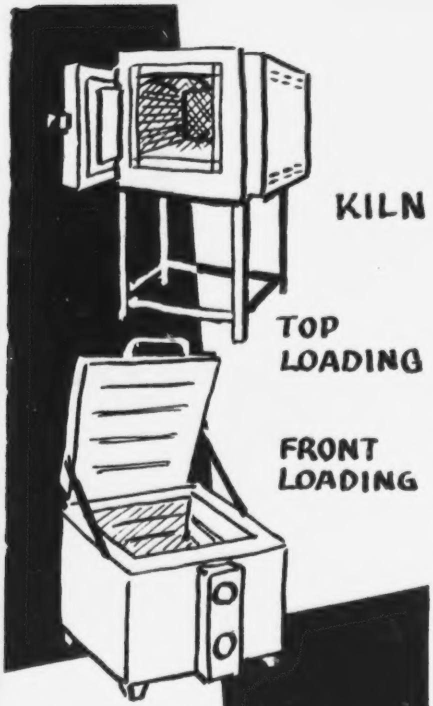
Wedging removes air bubbles that might be in the clay. If not removed the air bubbles might cause the piece to explode in the kiln.

Wedge by —

- Rolling clay in balls the size of tennis balls, cutting through the center of the clay ball with a wire, pressing the two halves back together forming another ball, and repeating the process until no air bubbles are visible when the clay is cut through. A number of balls can be prepared and stored in a plastic bag until needed for use.
- Slapping or pounding a lump of clay on a porous plaster block until air pockets are squeezed out is another method of wedging.

Native clays may be obtained along roads or streams or in diggings for basements of buildings in most localities. This must be soaked in water, strained, allowed to settle, the excess water poured off, and the clay allowed to stiffen to a workable consistency.

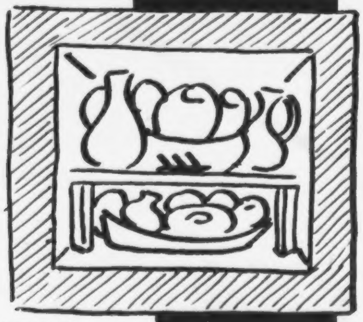




Modeling - Clay Firing...

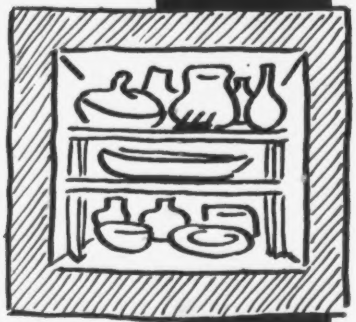
BISQUE FIRING

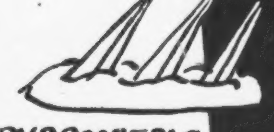
- First firing without glaze may be done with pieces touching and stacked in any position.
- Heat kiln to evaporate moisture. Fire to temperature recommended for the type of clay.
- Turn off kiln when correct temperature is reached.
- Let the kiln cool twelve hours and remove bisque ware when cool.
- Use pyrometric cones placed where they can be seen through the peephole. Use three cones, two which will melt before the highest firing temperature is reached. This will give ample warning against over-firing.



GLAZE FIRING

- Load kiln with each piece placed on separate stilts and without touching each other. This prevents pieces from sticking to the kiln shelf or to each other.
- Check firing instructions carefully — do not over fire or glaze will become fluid and run.
- Use pyrometric cones to give ample warning on firing.
- Allow kiln to cool for twelve hours before removing pieces.
- If glazed piece is unsatisfactory, it may be glazed and fired again.
- The shelves and kiln floor must be washed with a kiln wash before firing to prevent glaze drippings from sticking and damaging the surface.





Modeling - Pottery . . .

PINCH POT

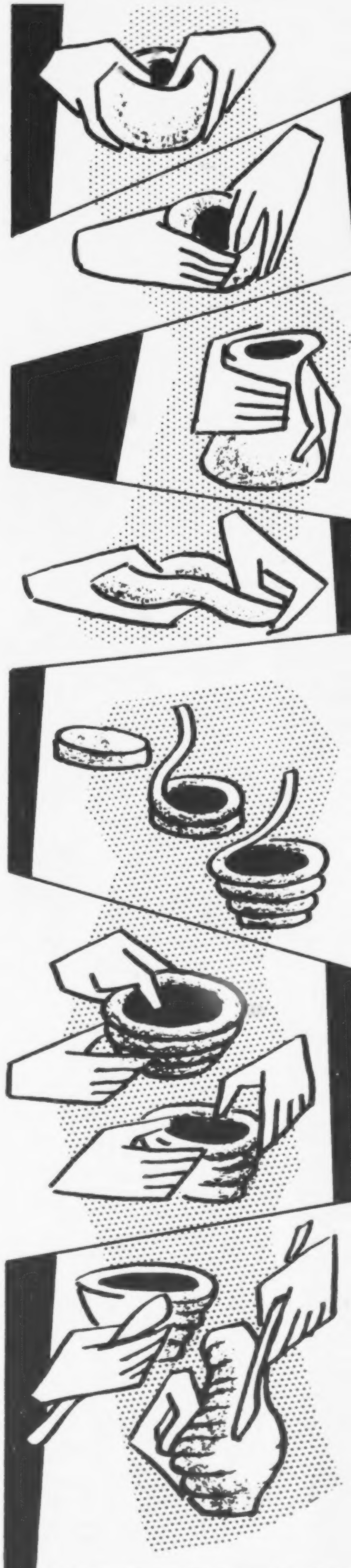
A small bowl or pot may be shaped from a ball of clay by using the thumb and fingers and palm of hand. Work thumbs into center of the ball to make an opening. Press down and out to enlarge opening and pinch clay between thumb and fingers until wall of bowl is desired thickness and height. Rotation of clay during pinching process will be necessary for uniform thickness of wall and shape of pot.

If clay becomes dry or begins to crack, moisten with water and continue forming or moisten and reform ball and start over.

After size has been determined the bowl can be shaped into round, oval, triangular, square, or irregular shapes.

A shallow bowl may be shaped from a slab or ball of clay pressed against the palm of the hand.

When dry, scrape a foot on the bottom or rotate the bottom on sand paper to establish a flat base.



COIL FORMS

Bowls and vases of any height, width, and shape can be made by the use of rolls or coils of clay.

For a base, prepare a slab and cut to desired shape or roll a coil of clay into a flat spiral of desired size and shape.

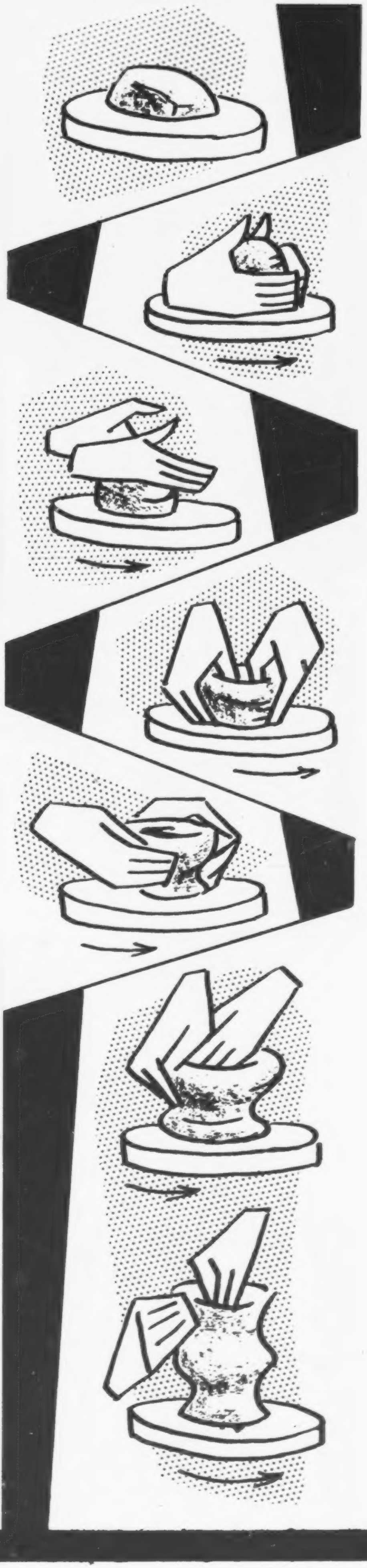
Roll out coils of clay and cut long enough to go around the base. Add coil on coil, welding firmly together until desired height is reached.

> Allow coils to become firm before adding additional ones. This prevents sagging.

The shape may be made wider or narrower by using longer or shorter coils.

The coils may be left as a textured design or they may be smoothed together to give the object a flat surface.

Allow the piece to dry slowly under plastic until clay appears light. Remove plastic and continue drying at room temperature.



Modeling - Pottery...

WHEEL THROWN POTTERY

The procedure for making pottery on a kick wheel or motor driven wheel is difficult. It takes much practice and steady hands. Mastery of the technique is rewarded by the symmetry and perfection of the finished object.

Select a ball of clay that is softer than that used for other pottery processes.

Center it on a plaster bat on a rotating wheel. Form hands into a cup. Lower the locked hands over the clay ball touching it lightly. Squeeze it with slight pressure forcing the clay into a cone. Release and wet hands and repeat until cone of desired height is obtained.

Place right hand on top of cone, left hand on side supporting right hand. Press down with right hand controlling sides of cone with left until cone is reduced to a short column.

Wet clay and hands often during process while raising to a cone and reducing to column three or four times.

When clay is centered, place nails of thumbs together. Begin to press down in the center of the clay, keeping fingers on outside to control the shape. When the thumbs have made a hole to within one inch of the bottom, pull apart slightly to enlarge center hole. Insert the left hand into the hole and place the right hand on the outside. Work the middle finger of the left hand from the center of the bottom toward the right wall until the left middle finger and the right middle finger are opposite each other. With gentle pressure draw both fingers upwards. Keep an even tension on each side of the wall until the fingers come together at the top. Wet hands and continue raising the wall slightly each time until a column the desired height is obtained.

The piece can be widened at the lower part by increasing the pressure of the left hand. Higher on the vase the neck may be made smaller by increasing the pressure of the right hand. The lip may be formed by holding the thumb and first finger of each hand together to smooth it.

Allow the piece to dry overnight under a plastic cover. When firm enough, remove from plaster bat by drawing a thin wire between base of piece and the plaster.

Modeling - Slab Bowls...

SLAB BOWLS

A shallow bowl may be made from slabs of clay. Place a portion of clay on a piece of oilcloth. Place two laths, spaced according to desired size of slab, one on each side of clay. Roll clay with rolling pin to level of laths.

If clay cracks, form into a ball, add water, and roll again.

RIPPLE BOWL

Place pattern of desired shape on slab and cut around it with a knife. Remove excess clay. Make balls of clay to size of desired ripple, space evenly around shape of slab, lift slab and place balls in position. The clay between the balls will sag making a ripple. Smooth edges with fingers.

FLOP FORMS

Prepare a low mound of plaster, clay, or sand as a form for molding. Cover clay with a double layer of cheese cloth. Cover sand with a layer of moist paper toweling.

Roll slab on piece of canvas, cut to desired shape. Lift canvas and clay, invert canvas and place clay over mold mound. Remove canvas and gently shape clay to mold. Store mold and clay in plastic bag overnight to retard drying. Remove bowl from mold and allow to dry.

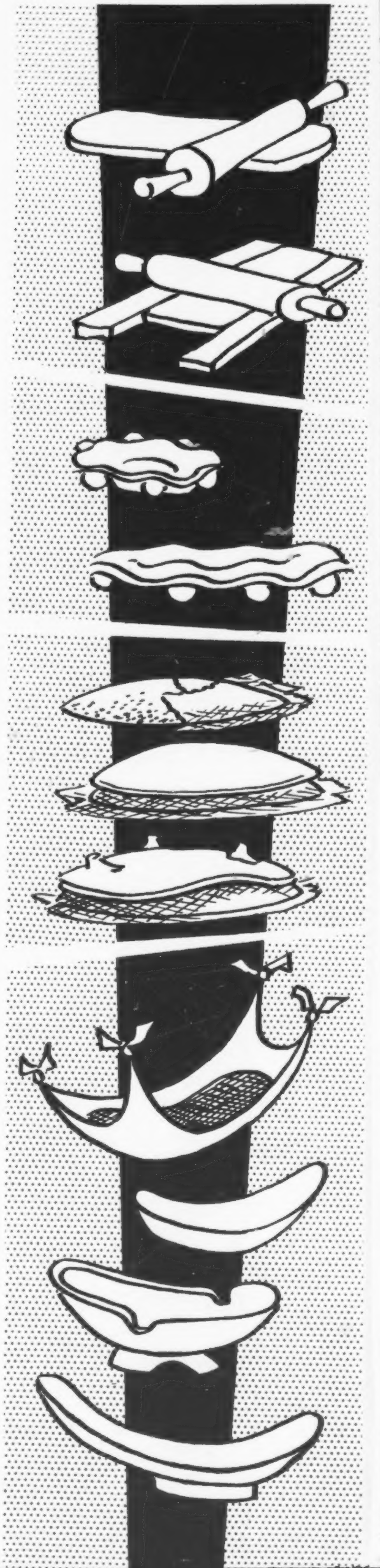
Texture from the canvas, cheesecloth, or paper toweling may be left in the clay, or the clay may be smoothed with slightly moistened fingers.

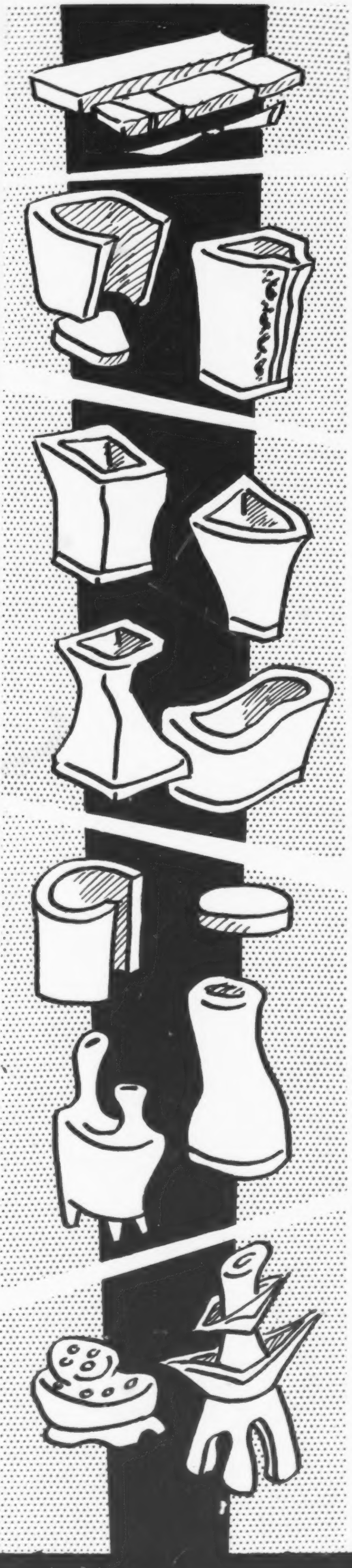
HAMMOCK SHAPES

Make a hammock mold by attaching muslin, burlap, canvas, cheese cloth, onion bags, or other textured cloth to the open end of a box. Allow the material to sag to any desired depth. Roll clay slab on canvas and cut to shape. Lift canvas and clay, invert, placing clay directly in hammock mold. Remove canvas and smooth clay with fingers. If texture is desired on the inside, press with same material as hammock.

Cover clay and hammock mold lightly with plastic and allow to remain over night.

Remove bowl and allow to dry.





Modeling - Slab Bowls...

- **SQUARE BOWLS**

  Roll clay slab and cut a base square or rectangle to desired size. Cut four side walls to fit exact size of base. Score overlapping edges of sides and base and cover with slip.

  Assemble one side at a time, allowing it to set before adding the next. Thin clay coils may be pressed on the inside of each corner or joint to give added strength.

  Variations on geometric box structure are more interesting. Distort the base square into irregular parallelograms or triangles. Distort sides by cutting irregular squares or by pushing and twisting to form more interesting shapes.

- **CYLINDER BOWLS**

  Roll clay slab and cut a base circle. Cut a rectangle the length of the circumference of the circular base and the desired height of the bowl.

  Roll into a cylinder and adhere to base with slip and thin clay coils.

  Distort cylinder into interesting shape by pushing or twisting.

  Combine groups of cylinders for turning bowls into vases, candle holders, or other forms.

  Combine cylinder shapes with square slabs for variety.

- **APPENDAGES TO BOWLS**

  If handles and feet are desired on ripple bowls, flop forms, and hammock shapes, form and attach to bowl before removing from mold.

  > Attach by scoring clay appendage and bowl at points of contact. Paint both with slip and press together. Allow extra slip to remain at joint until dry — then it may be scraped away.

  Attach handles and feet to square and cylinder bowls after the clay has become leather dry.

  A flat base may be put on either bowl by rotating the leather dry clay on sandpaper to flatten the bottom to fit the base.

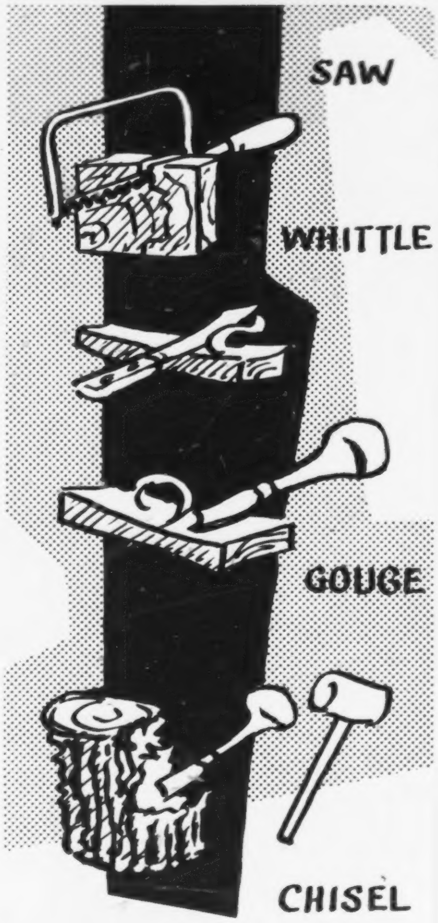
  Slip is made by adding water to clay until it is creamy in consistency. Always make slip of the same clay as the objects and pieces being welded or attached.

Carving . . .

Carving is a process where parts of a bulk material are cut, gouged, chiseled, and taken away to form a three dimensional object.

- In The Round — representation of a three-dimensional four-sided figure or object.
- Relief — representation of three-dimensional forms projecting from an attached background.
- Intaglio — representation of three-dimensional forms incised into a flat plane.

Plaster, clay, and synthetic stone may be molded into block forms. Other materials are blocks by nature; wood, stone, soap, block salt, ice, and insulating brick. Some materials that may be found or turned into block form are: candles, beeswax, styrofoam, plastics, balsawood, and soft metals.



WOOD

- Soft wood, such as, pine, redwood, and basswood are suggested for beginners. More experienced carvers may desire harder woods, such as, mahogany, walnut, and cedar.
- Any flat lumber the thickness of desired depth of a relief may be used.
- Always allow the grain of the wood to be a part of the design.

PLASTER

- Plaster of Paris may be poured into a cardboard or wood form to the desired shape and thickness.

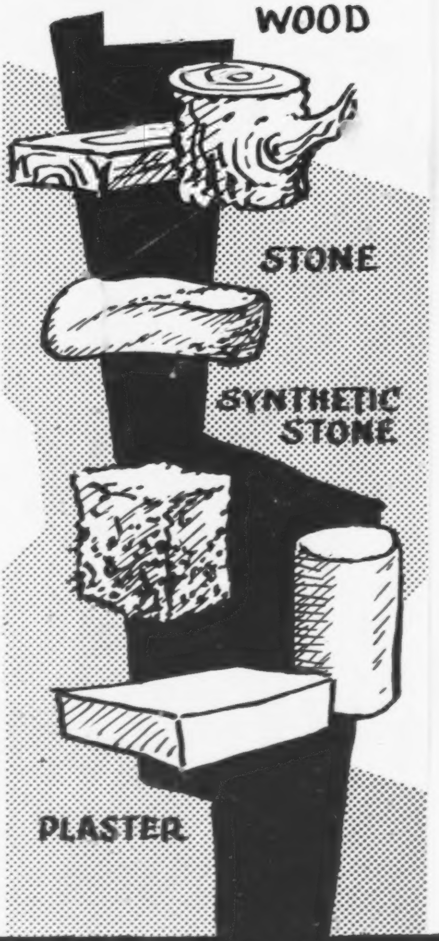
CLAY

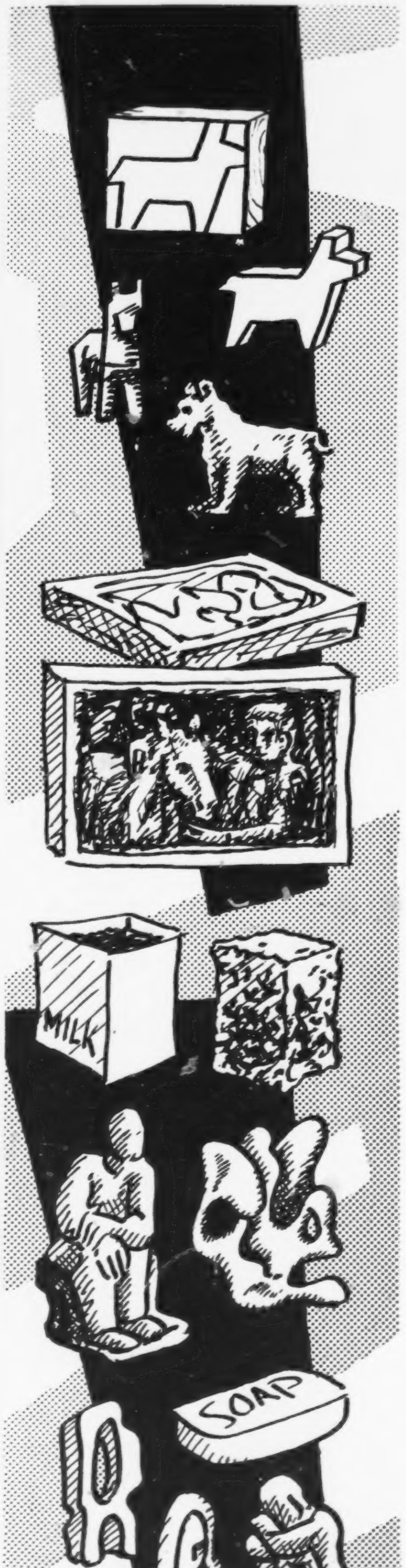
- Clay may be rolled or shaped into a slab or strip or poured into a mold and allowed to dry to leather hardness.

SYNTHETIC STONE

- Light weight aggregates may be formed by combining plaster, cement, sand, and insulating materials.

See recipe section for instructions for mixing plaster of Paris and synthetic stones.





Carving ....

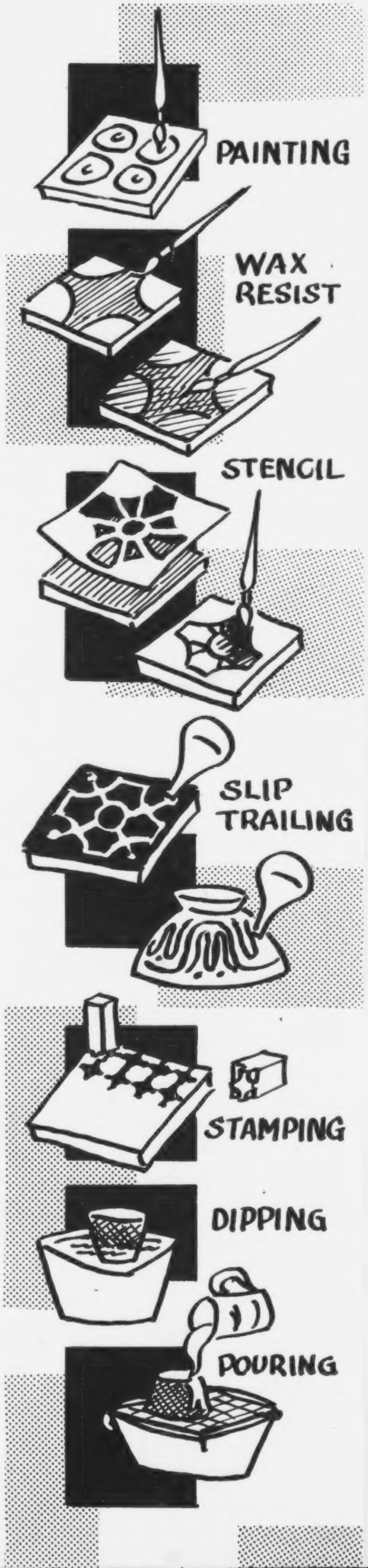
Though each material has inherent qualities that determine use of tools and finished appearance, the carving procedure is general.

- Select piece of bulk material to be used and study it for suggested design.
- Make preliminary sketches on paper. Visualize relief design from one side — in the round or full dimensional design from all sides.
- Sketch directly on material with chalk or charcoal.
- Blocking out stage —
  - Rough out design, with saw, chisel or knife.
  - Avoid cutting away too much at a time.
  - Cut first on one side, then on the other.
  - Work all the way around the object.
  - Keep one quarter inch away from drawn lines of design.
- Finishing the carving —
  - Develop shapes with small tools.
  - Sharp edges may be rounded by scraping, rasping, and sanding.
  - Add details as whole nears completion.
  - Tool marks may be left as desired texture.
  - Tool marks may be smoothed out and the whole piece sanded or burnished.

Simple tools may be used effectively for carving — pen knives, coping saws, files, rasps, round end chisels, hammers and mallets, scrapers, and sandpaper.

- The student should be made aware of sharpness of tools and should be taught extreme caution and care in their use.
- Tools should be kept sharp and in good condition. A sharp tool is easier to guide and will not slip as a dull one might.
- Hazards can be reduced by anchoring sculpture in a vise or clamp.

Modeling - Clay Decoration . . .



TEMPERA AND WATERCOLOR

Non-firing clays may be painted with tempera and watercolor. The paint will adhere better if applied before the piece is thoroughly dry. Cover paint with plastic spray or clear lacquer for protection.

SHOE POLISH

Shoe polish gives a protective cover of wax to non-fired clays and imitates the coloring of fire clays.

GLAZING

Glaze is usually applied to a piece after bisque (first) firing but may be applied to greenware (unfired) clay to save firing time. After glazing the piece must be fired again to produce color.

SLIP OR ENGOBE

An underglaze color is mixed with powdered clay and water and applied to greenware while it is semi-moist or leather dry.

An underglaze color must be covered by an overglaze after firing.

GLAZE APPLICATION

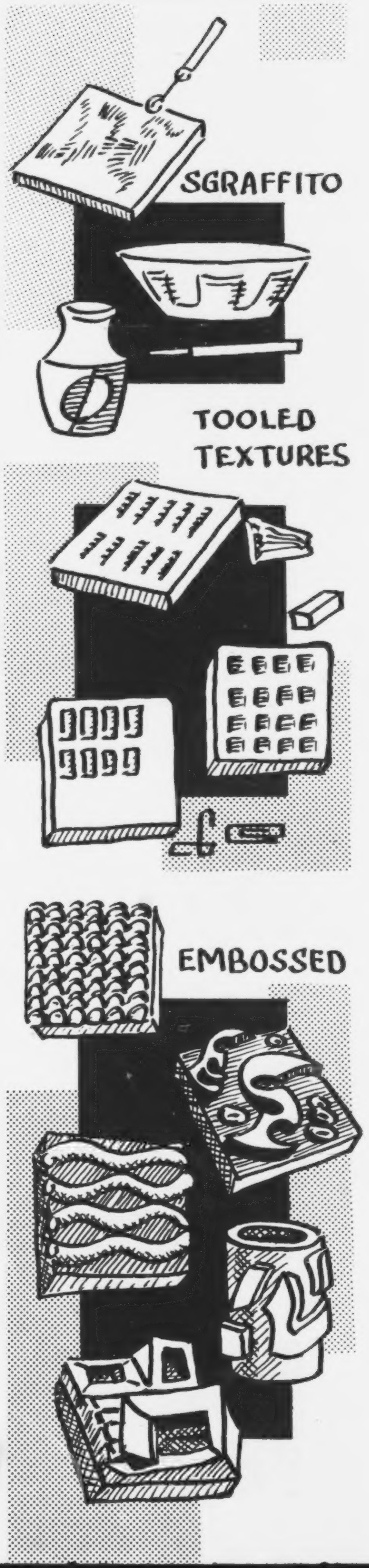
Painting - Paint on raw clay or bisque ware, on the clay itself or over engobe or glaze, using either glaze or engobe for the design.

Wax Resist - On a bisque-fired piece, paint a design with wax. Allow wax to dry. Cover the design with engobe or glaze.

Stencil - Cut a design from paper. Hold stencil in place and dab on glaze or engobe. Brush from paper to opening in stencil to prevent brushing under edges of stencil. An absorbent paper may be dampened and pressed onto piece. After painting lift damp paper carefully.

Slip-Trailing - Fill a syringe with glaze or engobe. Squeeze the syringe evenly while trailing a design on the surface.

Stamping - Cut a stamp from an eraser, potato, or other easily carved material. Brush glaze or engobe on the stamp. Press the stamp onto clay surface.



Modeling - Clay Decoration . . .

SCRAFFITO

- Apply glaze or engobe to greenware or bisque ware.
- Draw a design on clay piece.
- Scratch out the design using a pointed or sharp edged tool.
- The color of the clay will show through the scratched lines.
- A design in engobe may be given a coat of transparent glaze before or after bisque firing.

INCISED DESIGNS

- Using sharp tool cut relief decorations in semi-moist clay.

TOOLED TEXTURES

- Press into moist clay with any object that will make an indentation.
- Use ordinary hardware items having unique lines and shapes.

EMBOSSED PATTERNS

- Cut shapes and patterns from thin slabs of clay.
- Adhere to piece by welding with slip.

INLAY OR MISHIMA

- Incise a design in semi-moist clay.
- Fill with a thick colored slip.
- When partially dry scrape off excess slip flush with surface.

Modeling - Molding and Casting . . .

Modeling materials that can be mixed to a liquid can be poured into a mold to reproduce an object created in another medium or to form blocks or slabs for carving.

- Molds may be simple cardboard boxes or containers.

  Boxes may be used for casting block forms for carving, or they may be used with other materials to form one piece molds.

- Other one piece molds may be devised from strips of cardboard or wood.

  Frame a relief panel with strips the width of the plaque desired. Tack together with nails or wedge together with clay.

- A hole dug in the ground may be used for a one piece mold — especially suitable for sand casting.

The one piece mold produces a plaque or relief structure with dimensional shapes protruding from a flat plane.

- The shapes modeled in the mold material appear in reverse when cast.

- The casting may be given a protective coating and then used as a mold if the original design is desired.

A two piece mold formed in halves is used to reproduce objects in the round.

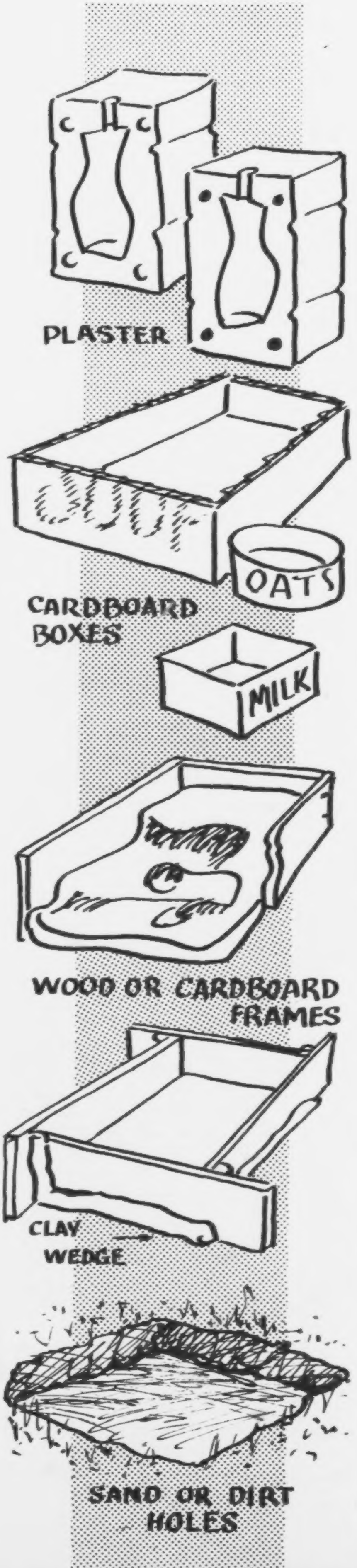
- Place a modeled piece in a container and pour or shape plaster around one half of the piece.

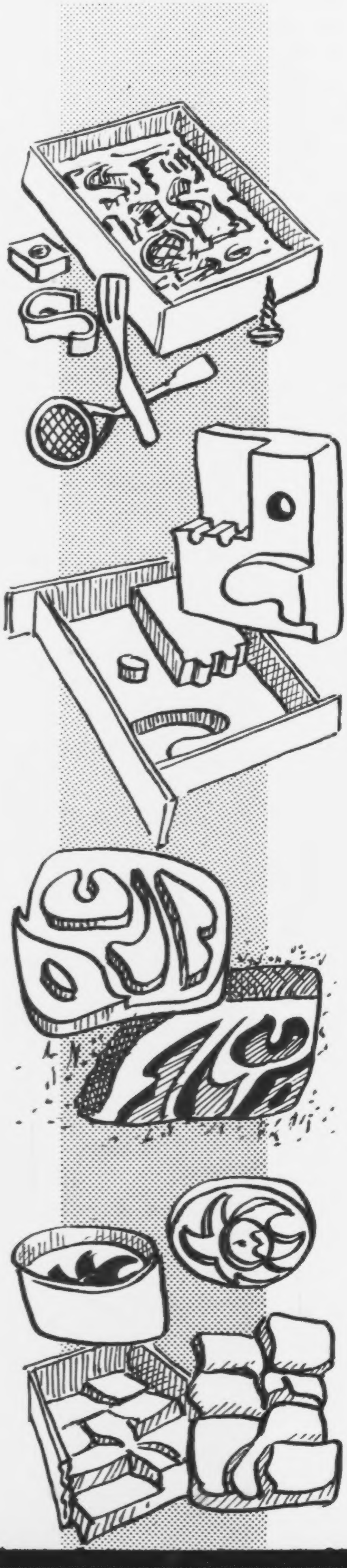
- Allow to dry.

- Cover surface of dried plaster with a protective coating, such as, petroleum jelly.

- Pour plaster forming second half of mold.

- An opening for pouring casting material into the mold may be formed after the mold has dried, or a tube or dowel rod may be inserted when first half of mold is formed.





Modeling - Molding and Casting ...

CLAY

- Press into a box.
- Model surface patterns with fingers or pressed or imbedded textural objects.
- Cast with plaster while clay is still moist.
- Non-hardening clay works well and may be re-used for other molds.
- Other clays may be allowed to dry and then cut, chiseled, and scraped to form surface patterns.

WAX

- Pour liquid wax into a box.
- When cool, it may be carved, scratched, and scraped to form surface patterns.
- Cast with plaster or clay.

SAND

- Place fine, moist sand in a box or hole.
- The moist sand will retain its shape when surface patterns are scraped, dug, and pressed into it.
- Cast with plaster or concrete aggregate.

PLASTER

- Pour plaster into boxes forming slabs.
- When dry, the surface may be carved.
- Form mold around carved slab.
- Cast with clay or cover with a protective coating and cast with plaster.

Assembling and Structuring . . .

Assembling and structuring differ from other sculpture mediums by the nature of the materials employed. Three dimensional objects are made from basically two dimensional materials. These materials are turned into flat or curved planes that must be joined together to form stable constructions by the use of other materials, such as, nails, solder, and glue.

Structured objects may be assembled from wood, metal, wire, paper, plastic, cardboard, and scrap materials. The manipulative technique is determined by the nature of the material and the manner by which the material can be adhered to itself or to the other materials in the structure.

- Relief Structure

  Use a flat sheet of wood, metal, plastic, or cardboard as a support.

  - Assemble and adhere materials in overlapping layers to achieve shallow depth of a relief.

  Assemble materials without reference to a background support.

  - Adhere or attach part to part in such a way that the overall relief structure supports itself.

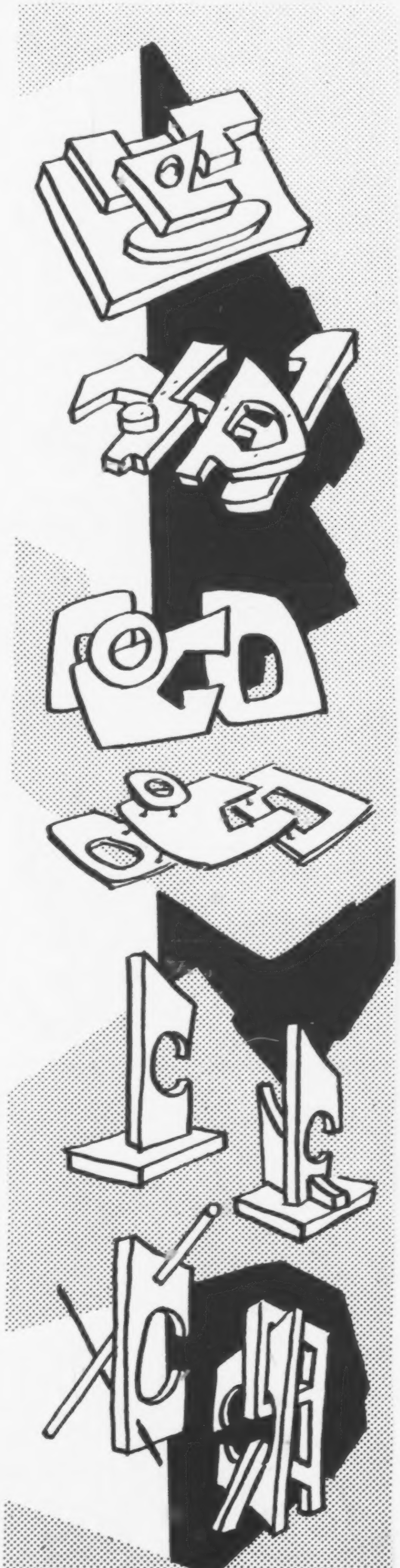
- Free Standing Structure

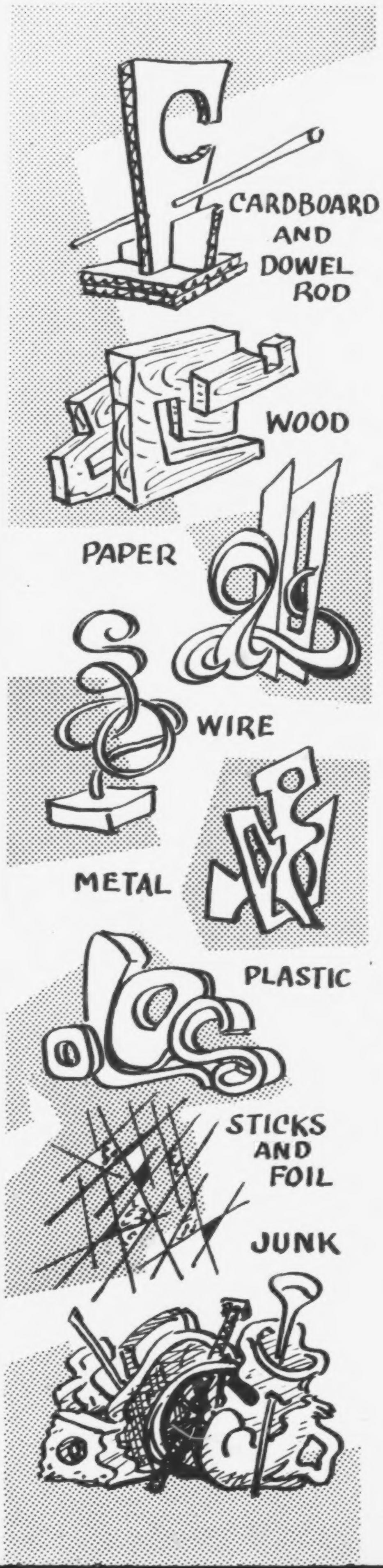
  Use a flat sheet of wood, metal, plastic, or cardboard as a base.

  - Assemble and adhere materials in vertical and horizontal structures to be viewed on all four sides.

  Assemble materials without reference to a base support.

  - Adhere or attach part to part in such a way that the overall three dimensional structure supports itself.





Assembling and Structuring...

METAL

- Metal in sheet, pipe, and rod form may be cut in shapes and assembled in planular designs by soldering, welding, brazing, riveting, or wiring.

- Flat pieces of metal cut to desired shapes may be combined with metal rods, pipes, and wire for variety of line, form, and texture.

- Other materials, such as: wood, glass, plastic, and string may be used with the metal if desired.

WOOD

- Economy, availability, and ease of manipulation make wood a good material for structural design. All types of lumber stock may be shaped and assembled in planular designs for relief or free standing structures.

- Wood working tools and power saws would provide more opportunity for highly finished work, but good structures can be assembled with simple saws, hammers, drills, nails, screws, bolts, and glue.

- Different woods may be combined in the same construction allowing the grain and color of each wood to give variety to the design.

- The wood can be stained, waxed, or varnished in natural color, or it can be painted with enamels or oil paints.

OTHER STRUCTURAL MATERIALS

- Sheet plastic, styrofoam, paper, and cardboard are easily manipulated and assembled and respond to a variety of experimental activities.

- For unusual variations these materials may be combined with string, wire, wood, and metal.

Textiles - Tie Dye . . .

Wash and press the fabric.

Determine the tying pattern.

Tie by knotting, binding, folding, sewing, or a combination.

Keep one side as right side on the outside of the bundle.

Prepare dye and test for color with a scrap of fabric.

Place tied material in dye for length of time needed for desired color.

Remove and squeeze out surplus dye.

Rinse until water is clear.

Squeeze out surplus water and hang to dry.

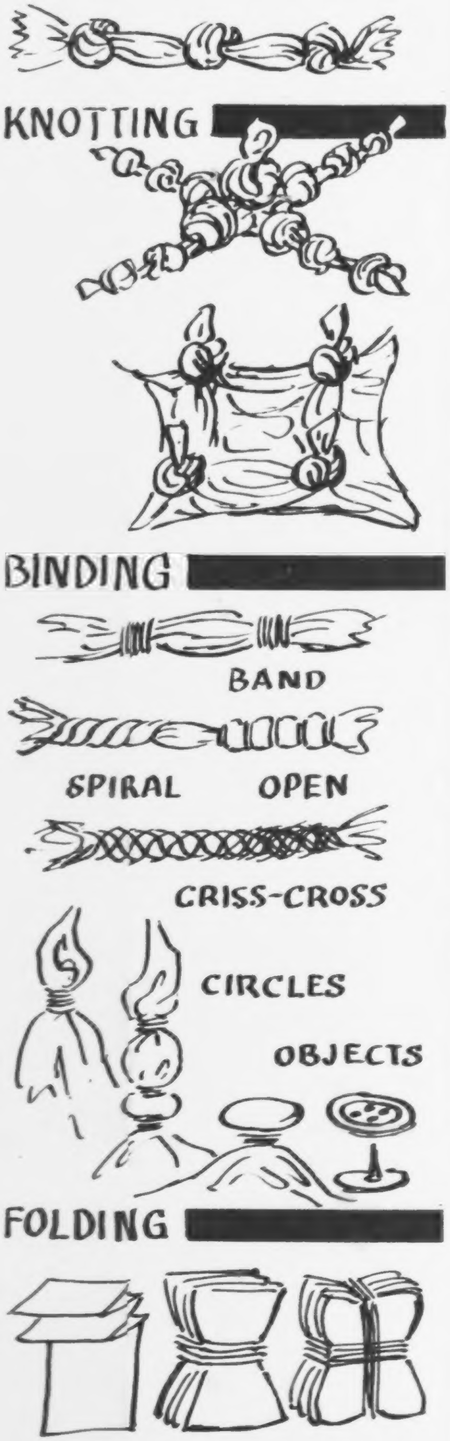
When additional colors are desired, tie and bind where previous color is to be retained.

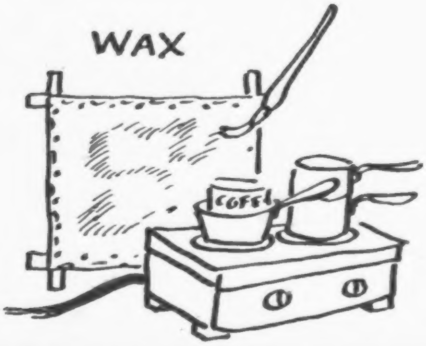
Repeat dyeing process for each color.

Dry as quickly as possible after final dyeing.

Untie while partially dry.

Iron while still damp.


KNOTTING
BINDING
BAND
SPIRAL
OPEN
CRISS-CROSS
CIRCLES
OBJECTS
FOLDING



Textiles - Batik . . .

Wash and press the fabric.

Stretch fabric on wooden frame — adhere with thumbtacks.

Plan a design. Transfer it to the cloth using charcoal — or use it for reference while working directly on the fabric.

FIRST WAXING AND DYEING

Melt beeswax over low heat — use double boiler on an electric hot plate.

Brush melted wax onto the fabric in lines and areas to be left the original colors of the cloth.

If cloth is heavy an application of wax on the reverse side may be necessary.

The first color should be the lightest. Consider design in which colors add to each other as overlays building up to a final color.

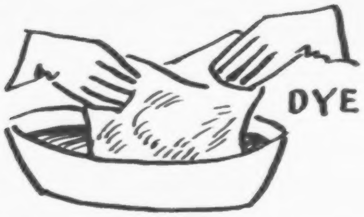
Mix dye according to directions in enough water to cover the fabric.

- Hot water will melt the wax.
- Cold water will crackle the wax.

Wet the fabric before immersion in dye.

Stir constantly, lifting and turning fabric for even coloring.

Remove from dye, rinse carefully, hang to dry.



ADDITIONAL WAXING AND DYEING

When dry the fabric is ready for next waxing.

Cover areas which are to remain the preceding color.

Follow same steps as for first waxing.

FINISHING THE BATIK

After final dyeing remove wax by pressing with hot iron.

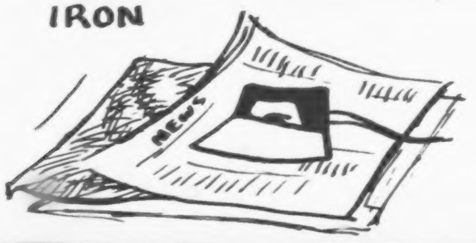
- Place sheets of newspaper on ironing surface. Use plain newsprint for top sheet.
- Lay fabric on paper and cover with plain newsprint and newspaper.
- Press with enough heat to melt wax.
- Repeat until all wax is removed.

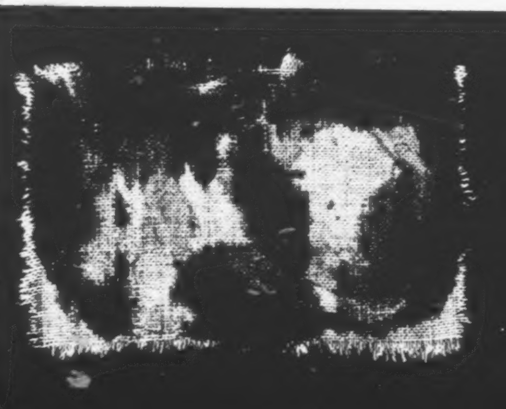
Fabric may be dipped in gasoline, kerosene, or other solvents.

USE CAUTION.

Dry cleaning will remove all excess wax. Batik dyes are not permanent and fabric should be dry cleaned instead of washed.

- Acetic acid mixed into the dye will give some permanency.





Mobiles . . .

MATERIALS FOR A METAL MOBILE:

One would need various weights of wire and pieces of sheet metal, of different gauges, files, flux, pliers, tinsnips, hammers, swivels, wire cutters, solder, soldering iron, etc.

PROCEDURE:

Cut the wire into various lengths as needed. Sketch of the planned mobile would help to see the sizes of wire and shapes one would require.

Cut a piece of sheet metal for the smallest wire. The selection of the metal shape and the sizes of wire needed involves artistic judgment. Consideration should be given to the amount of weight a given piece of wire will hold without droop. The weight should make the wire bow as this induces a quivering and adds to the mobility of the mobile.

Balance the smallest unit first then work up carefully to the largest unit. Figures 1 and 2 illustrate a method of fastening metal shapes to wire without using solder.

Figure 3 illustrates a loop for the wire rods. We try to locate the balance point of the rods, this is where the loop should be. The balance point is changing when metal shapes are attached; one ought to keep this in mind when locating the loops.

Figure 4 shows a method of making loops that helps us allow for shift from front to back to find the balance point.

Figure 5 illustrates a figure 8 joint that allows for movement. A fishing swivel would allow for a complete 360° movement and would likely be a wise investment for anyone working with metal mobiles.

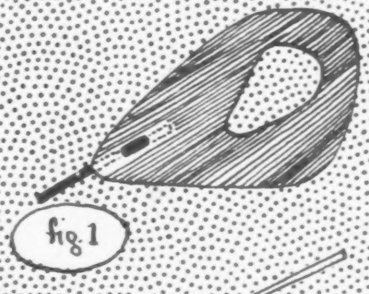


fig. 1

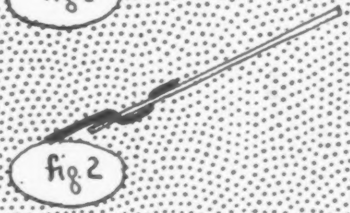


fig. 2

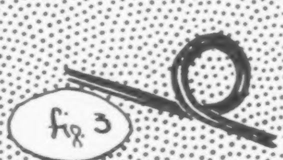


fig. 3

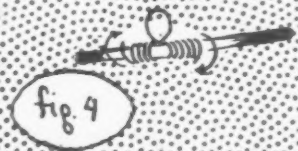


fig. 4

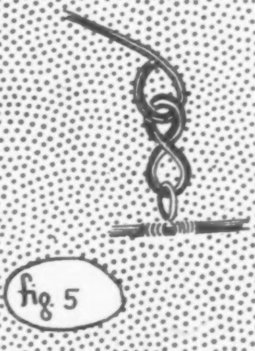
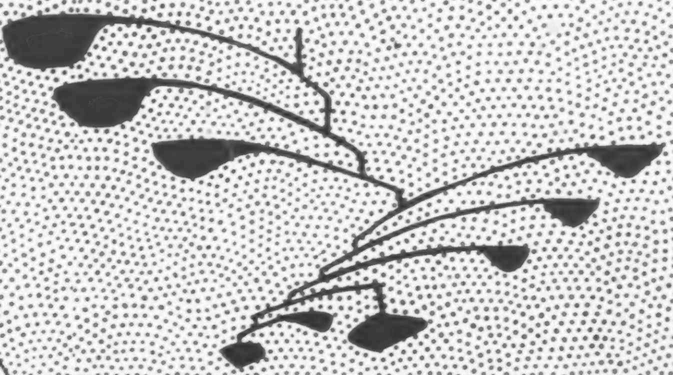
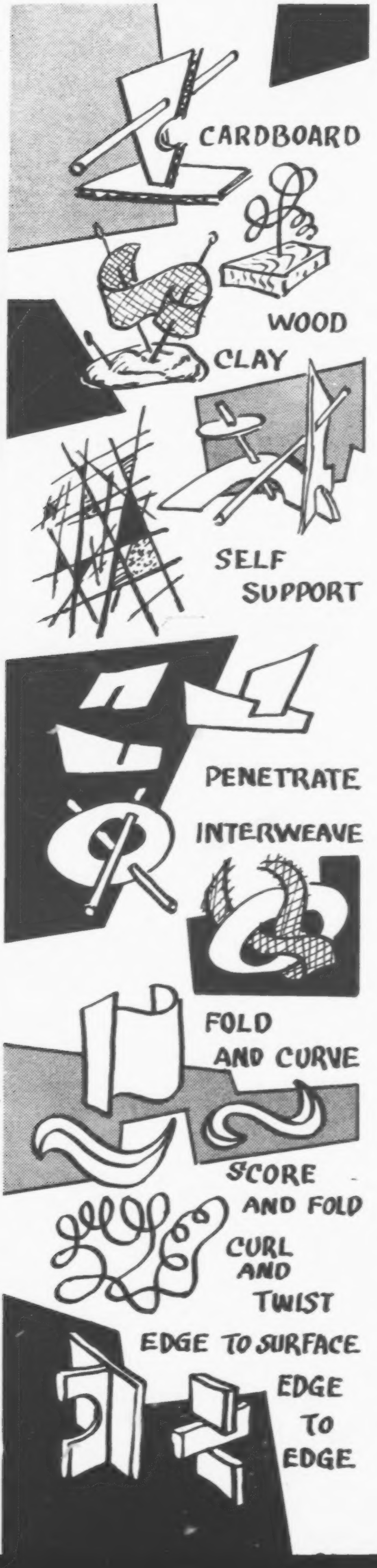


fig. 5





Stabiles . . .

Stabiles are stationary structures of abstract lines and shapes attached to a fixed base and projected into space.

Structural parts are assembled in form and space relationships that change in patterns and design as the stabile is viewed from various angles.

BASE

- Attach structure to a sturdy base support.
- Some structures may be self supporting by having parts that serve as legs or braces.
- The material and shape of the base should be in harmony with the design of the structure.

STRUCTURE

- Cut and assemble abstract shapes from only one material, such as wood, paper, cardboard, metal, plastic, or wire mesh.
- Assemble abstract patterns from 3D materials, such as, toothpicks, sticks, soda straws, twigs, bamboo strips, hardware, or wire.
- Combine 3D materials in their natural state with 2D materials cut into abstract shapes.
- Alter shape or use as found, such manufactured objects as, paper cups, paper plates, bottle caps, jar lids, aluminum plates, plastic bottles, cardboard tubes, plastic vegetable trays, and egg cartons.

ASSEMBLAGE

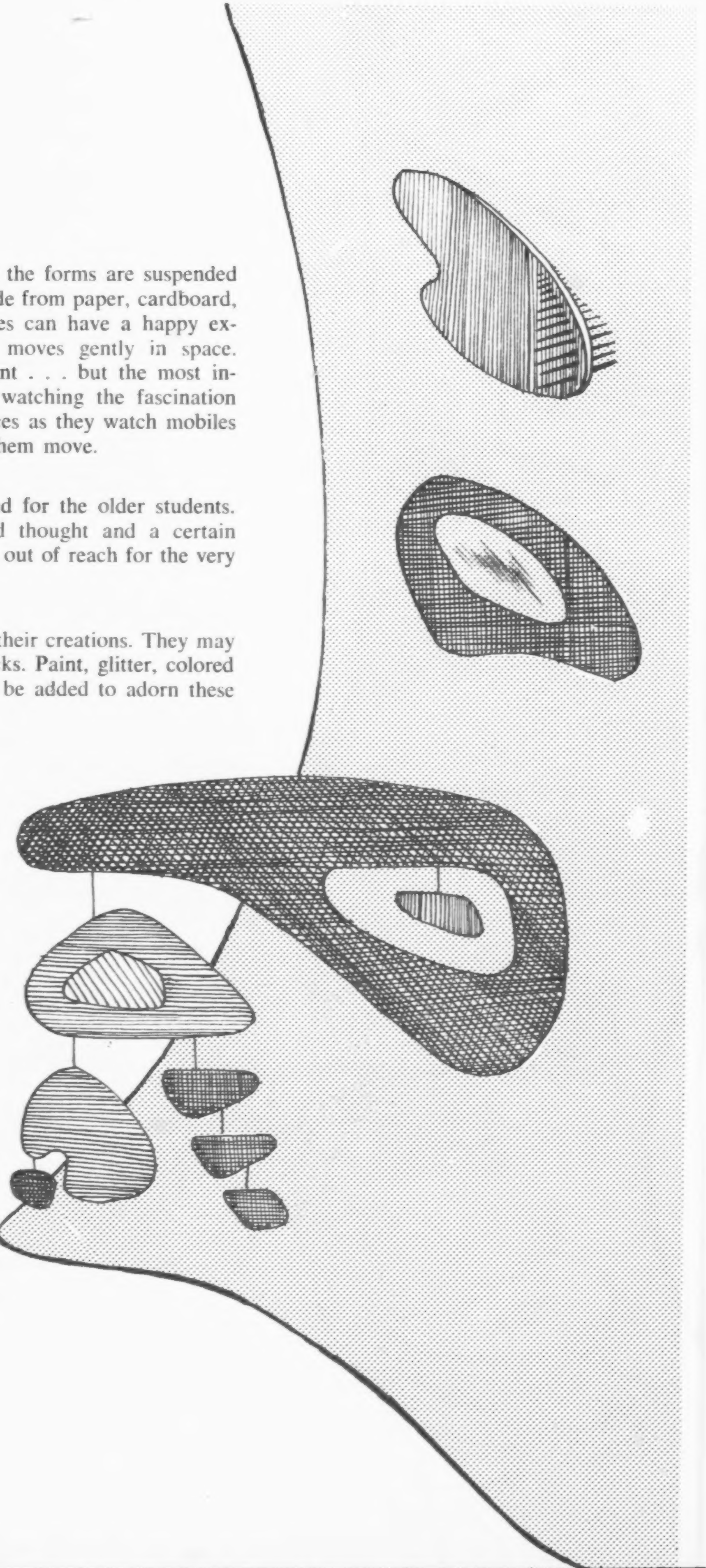
- Glue, nail, tie, or tape to adhere parts.
- Interlock crossed pieces.
- Interweave and penetrate.
- Fold and curve and stand on edge.
- Adhere edge to edge or edge to flat surface.
- Score and fold.
- Curl and twist.

Mobiles . . .

Mobiles can be constructed so that the forms are suspended one from another. These can be made from paper, cardboard, or metal. Pupils in the lower grades can have a happy experience making a mobile which moves gently in space. A slight breeze will cause movement . . . but the most interesting part of this comes from watching the fascination and expression on the children's faces as they watch mobiles react to every wisp of air making them move.

The metal variety might be reserved for the older students. They require much more skill and thought and a certain manipulative skill with tools usually out of reach for the very young pupil.

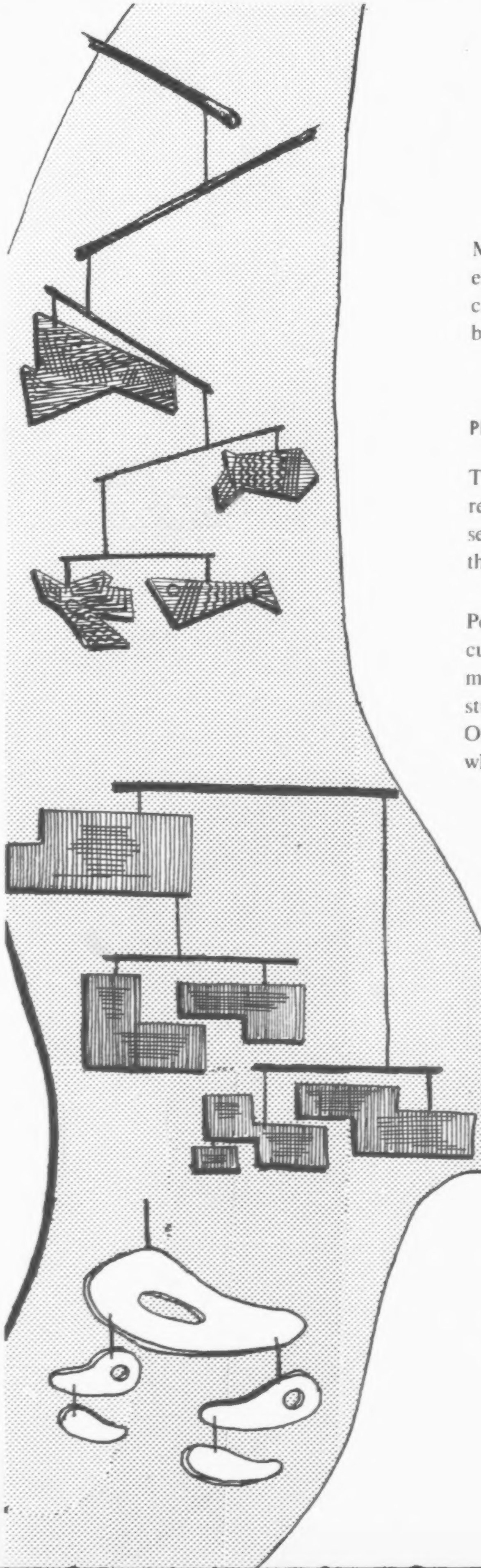
There are many ways of enhancing their creations. They may use string, yarn, tissue, and toothpicks. Paint, glitter, colored plastics, or colored cellophane may be added to adorn these imaginative creations.



Children must be careful to find those sensitive points of balance of the creation. Pupils will develop patient work habits because of this disciplining activity. Good results can be expected of individual or group attempt. The key to satisfactory results seems to be planning.

Children gain an insight to space and reaction of these objects in space when these constructions are tried.

Space itself has a different meaning to the students when they have the experience of making mobiles.



Mobiles . . .

Mobiles can be made from materials other than metal ones exclusively. They may be in combination with wood, dowels, cardboard, string, wire, styrofoam, sticks, etc. The above can be used to make a mobile that "suspends" from a backbone.

PROCEDURE:

The combination of the parts should form a feeling of unity required of any piece of sculpture. The parts need to be assembled by beginning at the bottom and working up towards the backbone.

Periodically test the mobile. Watch the effects of slight air currents on its movement. Pupils gain an appreciation of the movements upon the completion of their mobiles. Alert the student what to watch for as the movement in space begins. One can make figures, faces, and animals into mobile forms which can create interesting effects.

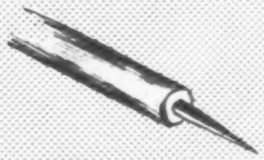
Selection of shapes to cut might be geometric, free form, natural, or any other one may think about.

The combination of these in the right proportion and their relationships with a search for the best and most fascinating effect of movement are the major objectives when working with mobiles.

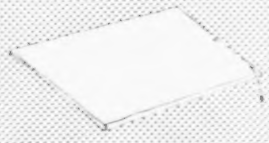
Space utilization with the forms used and the inter-reaction helps us to see the movement and enjoy the direction, almost creating a hypnotic effect on the observer.

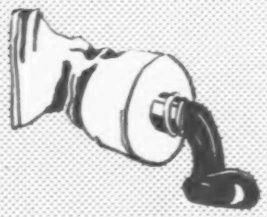
We suggest you make one, hang it up for the children to see, then watch the pupil reactions. We're sure you will agree that mobiles are fascinating.

Etching - Dry Point . . .



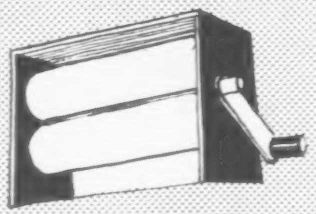
For this type of printing you will need a sharpened needle tool which can be made from a dowel, a sharp nail, a needle or heavy wire. You will also need to get a sheet of celluloid or clear plastic. Open tin can flat, cut off the ribs at each end. The sheet of tin can be used as a plate. Sheet copper also makes a good plate material. You will need printing inks. (Linoleum block type). Some sort of press is needed. A wringer type press can do a satisfactory job. You might be able to locate an old hand wringer. These will all make a satisfactory **print.**



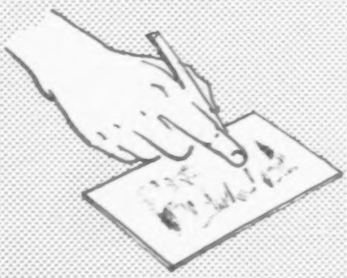


PROCEDURE:

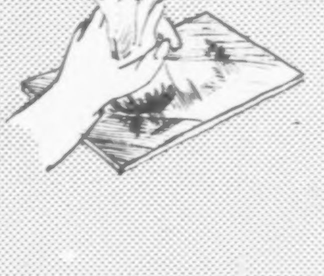
The design is made by scratching into the plate surface which makes shallow pockets for the ink. These scratches must be deep enough to hold ink after the plate is wiped clean. Experimentation will tell you when you have achieved this. The finished plate is inked with a brayer and wiped clean with a cloth or the side of the hand to remove the surface ink. The scratches will retain the ink. Soak some paper, dry with blotter so no water slicks remain, and run the plate and paper through the press. The ink which is in the scratched surface should transfer to make a print. Check the pressure if the print is poor. The plate may need a little work also. Dark areas print this way because of many scratches which are closer together. It is possible for very fine work etching using the above method.



This is one facet of printing overlooked many times by schools. It would surprise many if they realized how little equipment and supplies would be needed.



If you have an X-ray unit in your town, check the doctors and dentists for used x-ray film which is discarded after a certain amount of time, the material is excellent for the process described above. Vinyl tile can also be used in a similar manner.



Printmaking...

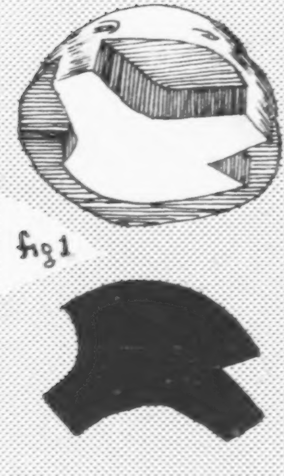


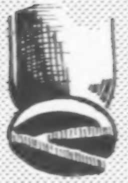
fig 1

Relief printing materials can include a variety of items: potatoes, carrots, corks, dowels, pins, wood blocks, cardboard, sponges, cloth, plastic products, inner tubes, rubber bands, yarn, corrugated card.

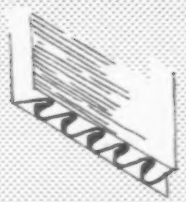
PROCEDURE:

For the soft materials such as the carrots, and the potatoes you have to cut the vegetables so children can print with the raised design. (figure 1)

Scraps of wooden blocks can be sawed with a coping saw to make lines of various widths. These create a design in many ways — shift, criss-cross, overlap and color changes. The surfaces in some of the hard materials can be cut into by the older children using knives and razor blades or x-acto knives.

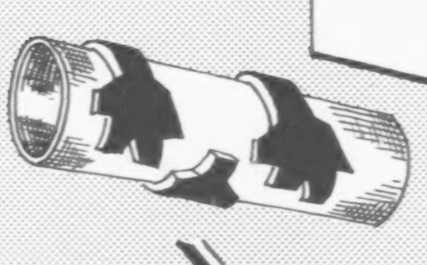


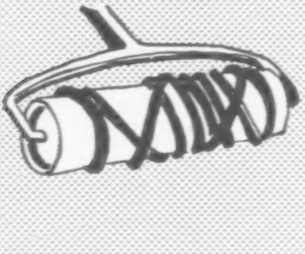
Cardboard pieces can be glued to blocks. A shellac, varnish, or lacquer coating will protect from water base paint. Spread a thin layer of tempera with the brush or dip them into a shallow dish and print. If you desire to use a brayer the tempera ink may need a little glycerine to make the ink tacky.

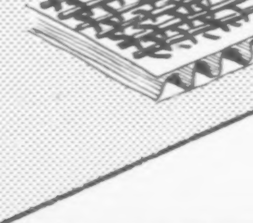


Printing of this type is usually done with patterns in mind. Various ways of repeating can be explored. Printing can be interesting by gluing various forms to rollers or blocks. Strings or yarn can be rolled around these cans or wrapped around blocks for good printing results. Rough textured cloth or burlap is cut into various sizes and shapes and glued for the printing process to blocks for interesting prints.

This is wonderful for gadgetry exploration. Answers to such questions as: Will it make a good print? What can I do with this? Let me try this. Wonder what other effects you can get? What will happen if we change the color? We are sure that you will have many more questions which will require answers. The solutions to these questions must come from the pupils to be effective.







Block Printing...

Materials you will need include: Linoleum, printing ink, cutting tools, (gouges) inking slab. The best material for linoleum cutting is called battleship linoleum and is usually mounted on wooden blocks. A new material which has an adhesive backing and does an excellent job is printmasters plate. This can be cut with gouge tools or with scissors. It is an excellent substitute and the best feature is no waste. Check the local merchants for scrap linoleum or vinyl tile.

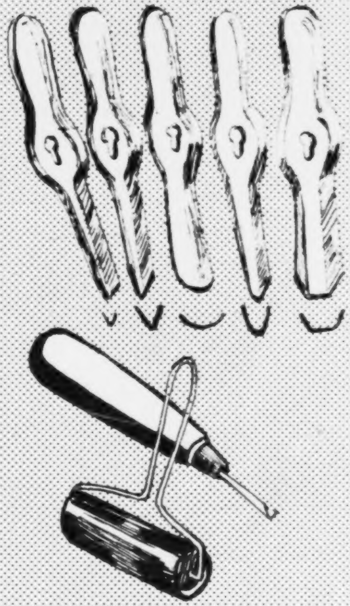
PROCEDURE:

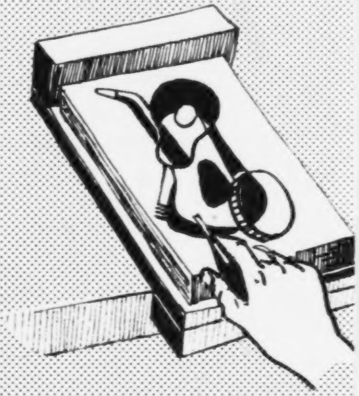
Careful planning is essential to good design when a linoleum print is made. Students have a tendency to work with fine lines. India ink drawings with brush are good introductions to the block print process. These brush drawings are more easily adaptable for linoleum. Fine lines are difficult to cut out. Children will find areas of light and dark mass the best for their abilities.

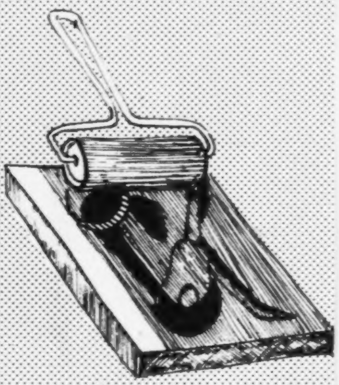
After the design has been cut, roll an inked brayer across the surface and make a sample print. Printing may be by foot pressure, with a spoon by rubbing, or sometimes using a small linoleum press. The best prints will need some sort of cushioning such as old newspapers or paper towels.

Care must be taken to protect the children from cutting themselves. The illustration shows a bench block in use which can be easily built so that the pupils have both hands free while cutting the block. Pupil will be comparatively safe if he remembers to keep both hands behind the cutter blades. Keep band aids on hand just in case an accident occurs. The blocks against the desk or table edge will hold them quite easily.

Have the children experiment with a printmasters plate. There is no waste because all the pieces cut can be glued to make an abstract design. This material can be cut with scissors so very little tool use is necessary. One word of caution if lettering, when making cards remember the letters must be reversed. Letters are upside down and backward after cutting. A mirror can be very helpful when cutting or making letters for printing. Have fun printing.







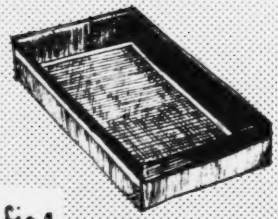
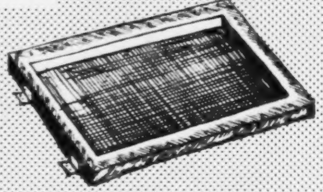


fig 1



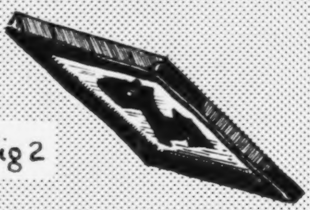


fig 2

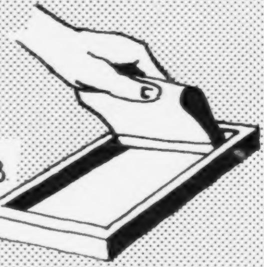


fig 3

Serigraphy...

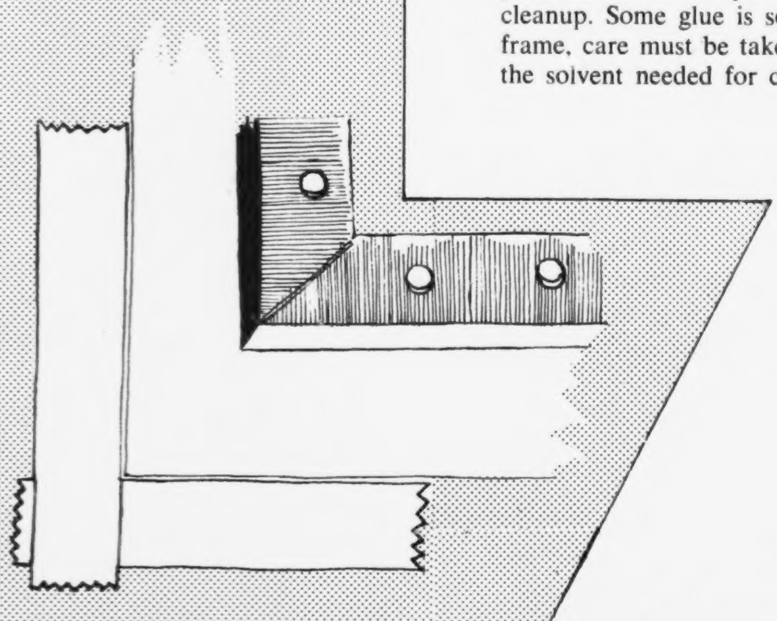
Serigraphy or silk screen printing . . . basically is a stencil process. Blocked out areas are affixed to a screen. This allows for close repetition. A simple silk screen can use a box for a frame and paper for stencils. More complex sturdy units usually are the wooden variety. They make use of lacquer stencils, a hinged frame, and oil-based paint which improves the ease of operation.

Making the frame is the first step whether it is of cardboard or wood. Embroidery hoops work well for small designs. Stretch the silk or a substitute — organdie, Swiss bolting cloth, nylon or taffeta which will hold the stencil. Tape the inside corners. This prevents seepage of ink through the frame.

Stretch the screen very tightly. If a wooden frame, begin at the center on all four sides and alternate towards the corners. Placing the screen and stencil on the bottom side of the frame and dampening paper stencil with paint will keep the stencil in place, when the paint is pulled across the screen with the squeegee. Glue edges will give a "soft" edge. A "hard" edge for lettering or poster work will be best done with a paper or lacquer stencil. A taped 90° angle provides the operator with a registration mark.

Block out areas both positive and negative with crayon, glue, shellac, lacquer, stencil film or paper.

A thick paint is used for printing. A squeegee then is drawn across the screen which allows paint to be deposited onto paper through the open screen areas. When using an oil based paint it will necessitate a cleanup with turpentine. The water base paint seems to be preferred because water can be used for cleanup. Some glue is soluble in water and if used to make a frame, care must be taken in cleanup. If shellac was used then the solvent needed for cleanup is alcohol.



Aluminum Etching...

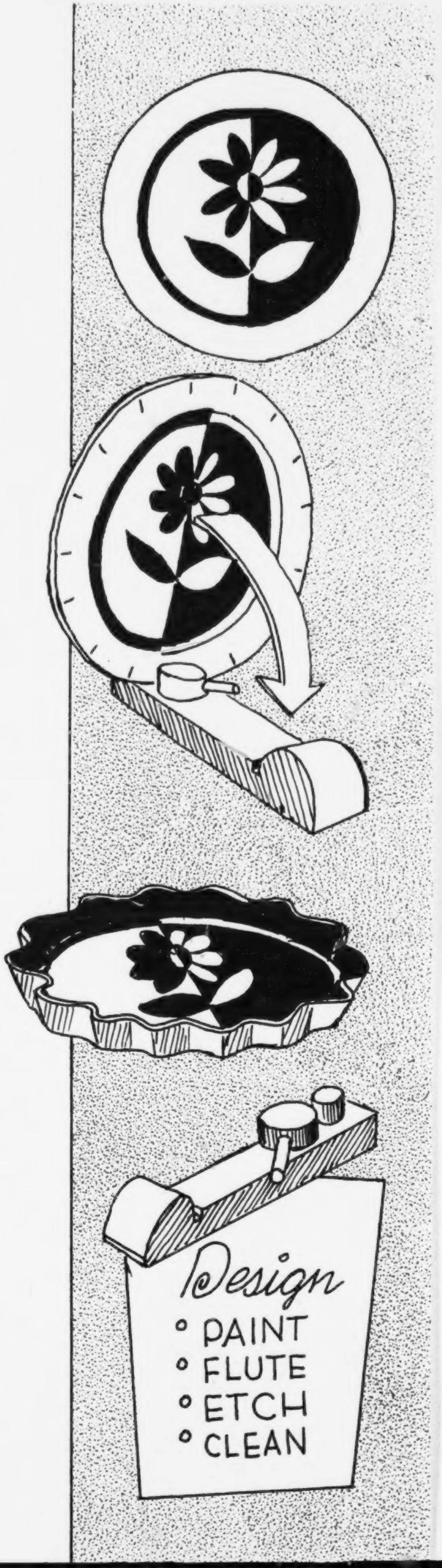
Aluminum is excellent for etching with new mordants that have been put on the market. Usually safer than most acids recommended for etching. Nitric acid used only with students familiar with its danger. This is used usually with copper etching.

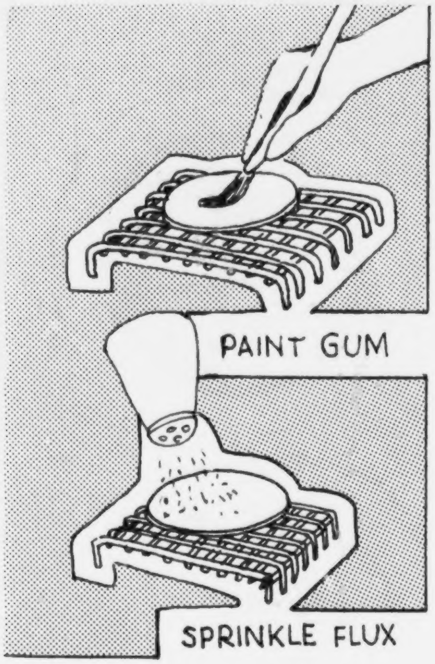
We try to use material which has considered the safety of children. The process is similar in either case, but if a choice were given, preference should be shown for the mordant.

- Prepare the design, allow an inch border for fluting. If tray is pre-formed, the space available limits the design.
- Paint dark areas of design with asphaltum. (protects) Any area not painted with asphaltum will be etched.
- Use fluting tool as illustrated to turn up tray edge. Inspect after fluting for chipping of asphaltum. You must touch up the spots that have flaked away or the etching solution will eat away the metal.
- Prepare the mordant according to the instructions on the can. Pour into the tray. Watch that none of this mordant spills over the edge and gets underneath the tray or the mordant will etch away the bottom of the tray. To be on the safe side if expense is not important paint the bottom of the tray. Use a feather to gently stir the solution. Bubbling occurs for a time but *do not get too close to inhale the fumes*. Etching time will usually be indicated on the can. After etching is completed pour solution off into non-metal container carefully. Keep the solution labeled. It is good for more etching.
- Put a small amount of turpentine into base of the tray and allow to soak a short time. With paper towels work over the asphaltum areas to loosen the tarry substance. Remove as much as you can and repeat the process until the tray is clean. Wash under tap. *Caution:* protect the clothing during the above process.

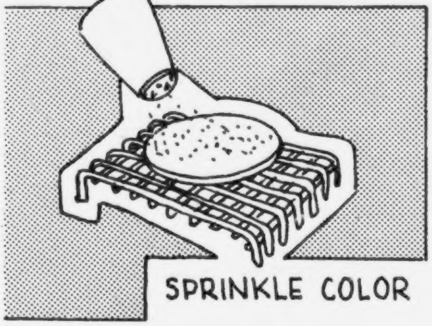
Steel wool is sometimes used to give the etched surface a texture. After steel wool is used, repolishing of the metal to a shiny high gloss is impossible.

Aluminum trays also come in color coated surfaces. Blue, copper, red, green, etc. When etched they make an interesting effect.

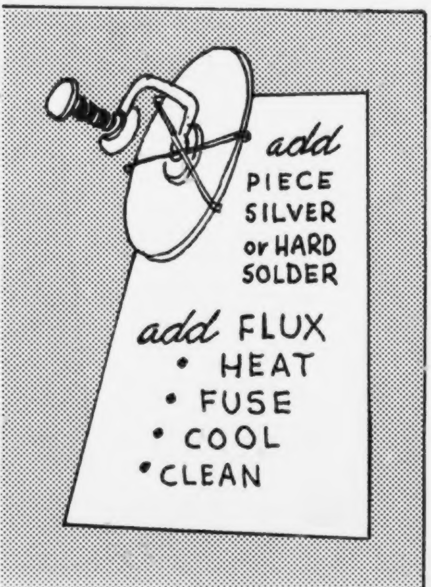




FIRE - COOL
Clean carefully



ADD LUMPS - THREADS
FIRE - COOL
Clean the back



Copper Enameling . . .

Shapes for copper enameling can be purchased from any art supplier. Check the supplier listings. Scraps of copper can be sawed with jewelers saws if school has the equipment. Small C clamps, bench pins and jewelry findings complete necessary items needed.

Remove all grease and oil from shapes to be enameled. Other materials can be enameled but we have found the pupils work with copper best.

After cleaning, gum tragacanth is applied with a brush. Avoid touching the piece. Apply an even layer of flux dust, edges first and place into pre-heated kiln carefully. When surface is smooth remove from kiln. Place on asbestos surface to cool. After it has cooled then clean and apply gum solution again over the flux. The color is then sprinkled on with a shaker and fired. A variation can be made by adding lumps and threads. You will achieve some unusual design possibilities.

Place in kiln carefully or use a benzine torch at the base of object to be enameled. Bring to a red heat as you watch the enamel melt of fuse. In the kiln a heat of 1250° to 1500° is used. Pupils may be wise to study melting points of the various metals while experimenting. These may be fired repeatedly if not satisfied.

Object is allowed to cool after firing and again carefully cleaned to prepare for soldering findings. The pin back, cuff link, and earring back are called findings. These may be purchased from any craft or hobby shop. Some thin fine wire is also needed.

The finding is wired over the enameled piece, add some flux, apply heat and a piece of solder. As soon as solder melts remove from flame. Tweezers hold the finding as soldering takes place. If hard solder is desired a thought should be given about cost, although we found hard solder to be best. A higher temperature is needed.

Tiny squares of hard solder are cut about the size of this typewritten x. Hard solder requires flux as well as higher heat. Hard solder is usually used for fine quality jewelry work and should be handled by students with experience. Use wire where possible — it will help the student do a better job.

When hard solder is used a small amount of solder is necessary and as heat is reached the capillary action fuses the copper to the findings.

Aluminum Foil Tooling . . .

Plan a design suitable to foil work. Keep design simple. The drawing is placed or clipped to foil. Paper toweling or newspapers are used as padding under the foil. Pressure from a modeling tool, or eraser side of a pencil, or leather tools creates a three dimensional effect. Too much pressure too soon on soft aluminum makes one reach the elastic limits of the metal, at which point the thin metal cracks. The gradual stretching of the metal makes the best results. The metal is pushed from both sides.

The backgrounds may be plain, smooth, rough, textured. Lines or dots can be applied with a leather tool, pencil, ballpoint pen or stick, in fact, any object which will give the desired effect.

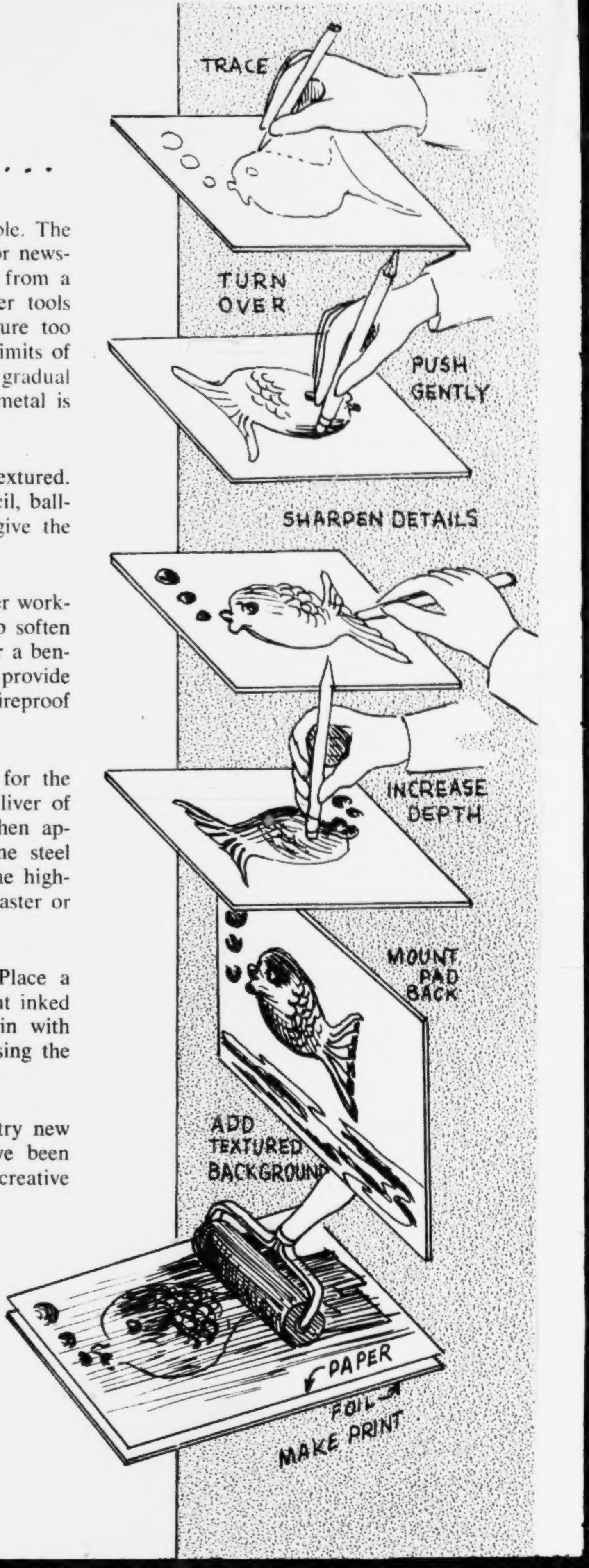
Copper differs from aluminum in that it gets hard after working it. Copper requires annealing which is heating to soften the metal. Cooled with water. Use a bunsen burner or a benzine torch for annealing. Perhaps it would be wise to provide material to cope with heat such as asbestos gloves, fireproof area, tongs for holding metal while heating.

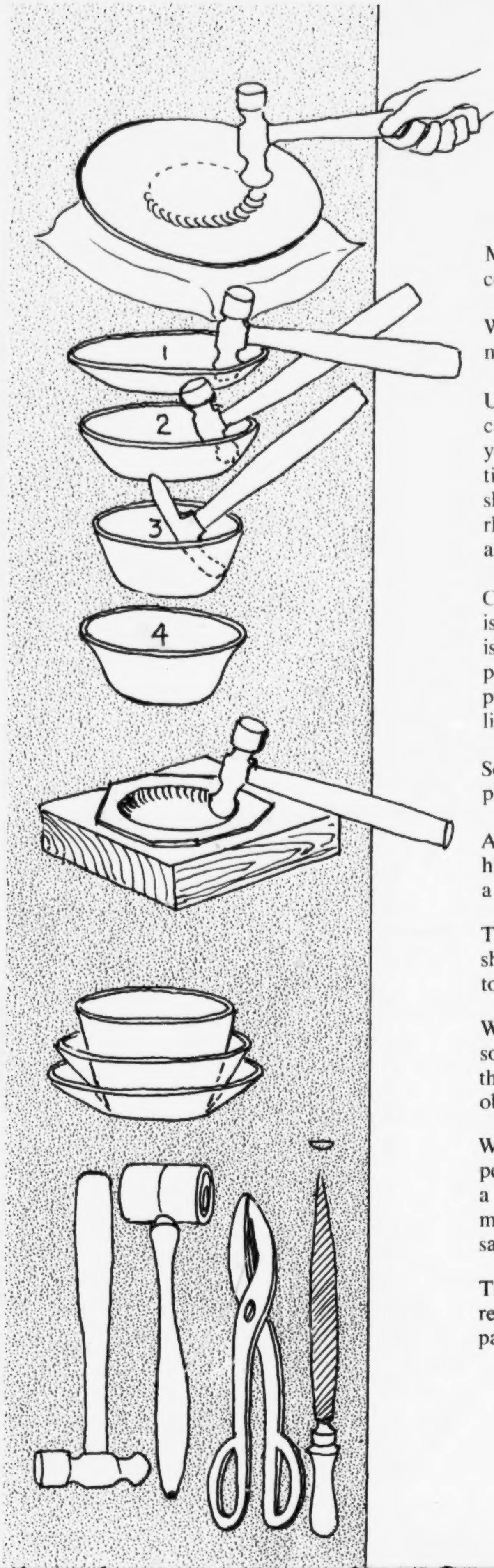
The tooling process is similar to aluminum except for the annealing process. Copper can be darkened with a liver of sulpher solution (has slight odor). This solution when applied darkens the incisions made in the metal. Fine steel wool can be rubbed over the surface to bring out the highlights. The copper is then varnished or shellacked. Plaster or cotton can be used as back padding.

Children have experimented with brayer printing. Place a sheet of paper over the modeled foils and with a light inked brayer roll over the foil. The print can be filled in with crayon or paint. More prints can be made by reversing the foil.

Keep the class projects open ended so student can try new approaches. This printing technique would not have been discovered had a strict procedure been followed. A creative atmosphere is very important in any classroom.

Avoid saying this is the only way to do this. Try to encourage and submit problems requiring solutions. Give ample opportunity to find these. Remember for every successful solution failure is part of the problem solving method.





Metalwork . . .

Metals of various kinds are used in beating as follows: tin, copper, brass, aluminum, pewter, silver.

Wooden molds, sandbags, hammers of various kinds are a must to get good results in beating and forming.

Use a ball peen hammer and a copper disc or an old coffee can lid. Start at the center and carefully rotate the metal as you beat it rhythmically until you reach the outer edge. Continue the beating process until the metal is formed to the shape wanted. You are stretching the metal as you beat. A rhythm in the beating is important coupled with the same amount of power in the beat to give the best results.

Copper requires annealing as you work. Soften it as often as is necessary. Continue beating till shape finished. A planishing hammer is used to finish the surface. This part of the process is long and must be carefully done to eliminate imperfections and achieve a well-formed piece. Cost of materials limits this process to the junior and senior high schools.

Sound-proof boards will absorb pounding noises but when placed under sandbags noises are deadened.

A wonderful disciplining experience also helps the child vent his tensions on an object. Child learns control and develops a rhythm and strength as forming of metal is completed.

The excellent workmanship of early American metalsmiths should provide for us an appreciation which would help us to see the rich heritage we inherit.

With experience children will try uniting metal by using the soldering technique. The child develops an appreciation of the care and amount of skill required to make beautiful objects from flat metal.

With modernization and automation more and more of the people are wondering what to do with their leisure time. What a wonderful opportunity to spend a few remaining years making beautiful objects. They can only result in pride and satisfaction.

The process is time consuming and results are slow. Possible rewards to children in using newly aquired skills are care, patience, pride of achievement.

Sawing - Piercing . . .

A design is prepared and transferred to metal piece. Design should not be too intricate. A hand drill is used to make starting holes for various parts of the design. (See illustration at right)

A jewelers saw blade is inserted into the hole made and attached to the frame. Use a bench pin to hold the work or a vise, cut with downward strokes keeping the saw as vertical as possible. Do not force saw or cut too fast as the blades are delicate and break in normal use easily. Repeat as often as necessary. When design is completed cut the outer edges. No drilling is needed for the edge but unusual edge treatment is desired at times as a scallop or smooth curve.

A fine set of needle files are needed to remove burred edges from the tiny places, corners or curves. Steel wool (fine) is used to polish the metal cut. Sometimes a polisher grinder is used. Supply goggles as a safety measure if automatic polishing is done. Jewelers rouge is used with power polishing.

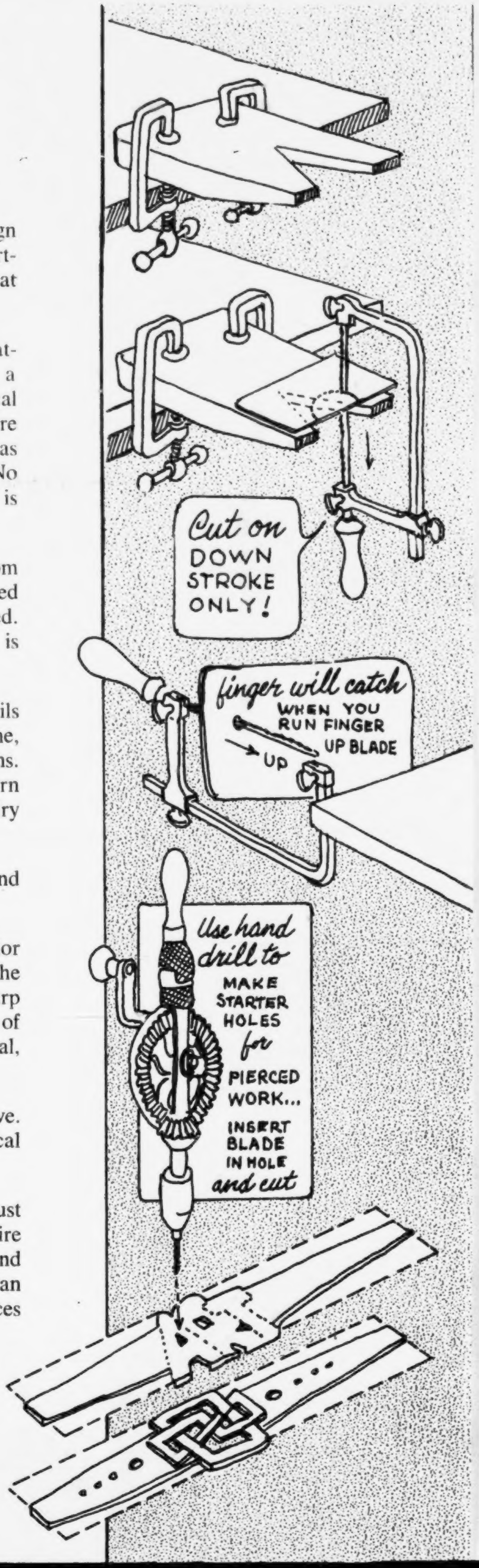
Protective measures can be taken for the hands also. Pupils using power tools must concentrate on what is to be done, therefore the power tool area is not the place for conversations. Insist on this precaution. No loose clothing should be worn while working about the machinery. Remove all hand jewelry while working around power tools.

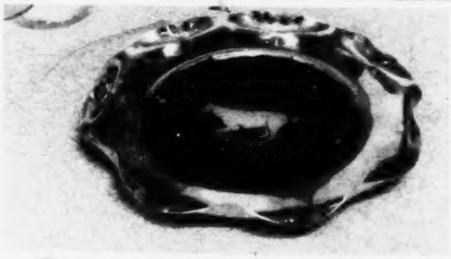
Much of the sawing and piercing can be done with the hand tools but power equipment speeds up the process.

This is another area which should perhaps be limited to junior and senior high school students. The equipment cost and the maturity necessary to operate some of the power tools and sharp instruments makes lower grade participation doubtful. Use of coping saw with plywood is a good activity to replace the metal, any experience with a coping saw will help later on.

Many classrooms are not designed for work mentioned above. If ever you are planning room renovations, remember electrical outlets one would need at the work areas.

To make the best use of the equipment available the pupil must share and take turns. Station procedures are used which require certain tools. Groups of six to eight students can work and revolve with the other work areas set up. Several processes can be operating at the same time. All can have the experiences necessary using this method.


Cut on DOWN STROKE ONLY!
finger will catch WHEN YOU RUN FINGER UP BLADE
Up
Use hand drill to MAKE STARTER HOLES for PIERCED WORK... INSERT BLADE IN HOLE and cut



Metalwork Examples...

Top photo at left shows the start of metal beating. You can see the metal starting to stretch.

The work is shown in various stages of forming. The second photo in the second line shows the use of a rubber crutch tip placed over the hammer to prevent marring of the metal if this is desired. The fourth line photo at left shows the use of a planishing hammer to take out irregularities. If properly executed, this will put a finish on the metal piece. Requires much patience.

The tray in line five shows the etching process taking place. Etching mordant is placed in the shallow part of the tray. The shiny part of the upper part of the tray should also have been painted with asphaltum to prevent etching by the mordant.

Lines six and seven show the process of metal foil tooling. Lower grade children can be quite successful with this process. Upper grades might try the more difficult copper foil tooling.

Copper enameling is shown in the three photographs at the bottom. The middle photo shows the attachment of a finding to the fish shape. Upper grades should try this if an enameling kiln is available.

The final photo at extreme right bottom shows what can be done with wire sculpturing.

The possibilities are limitless. As you can see some of the processes require special equipment but many of the metal activities can be adapted to lower grade work with a minimum of special tools.

Jewelry . . .

a. Several layers of paper towel or newsprint may be pasted together. While still damp draw a flower on the paper and cut it out with a scissors. Gently lift the petals and shape by pressing with the fingers. Dry and paint. Cover with clear nail polish or shellac.

b. Use the recipe for salt clay (in the recipe section of this guide). Roll small pieces to form beads. With a toothpick pierce each bead and string together. Pins may also be made from salt clay.

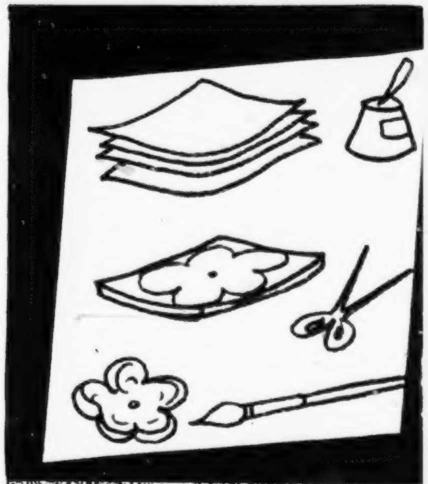
c. Material scraps may be used for jewelry by cutting them larger than the button or cardboard form to be covered. Findings (pin backs) may be sewn on.

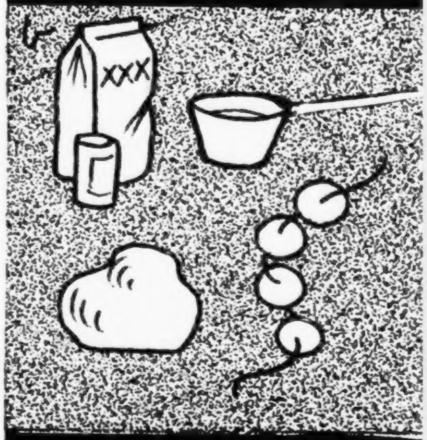
d. Pompoms are different for earrings and corsage pins. Cut two round pieces of cardboard with holes in the centers. Use yarn to wrap them together as shown. Wind securely; cut yarn between the cardboards and tie tightly.

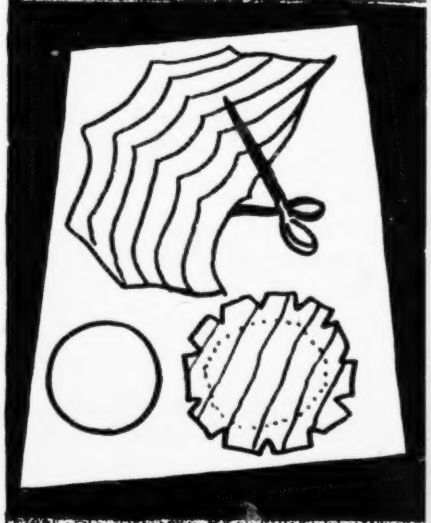
e. Various small pieces such as rice, shells, macaroni, aquarium chips and bits of plastic can be glued to a form . . . wood, cardboard, poker chips, oval can lids from tea or cocoa, or other flat shapes that can be found.

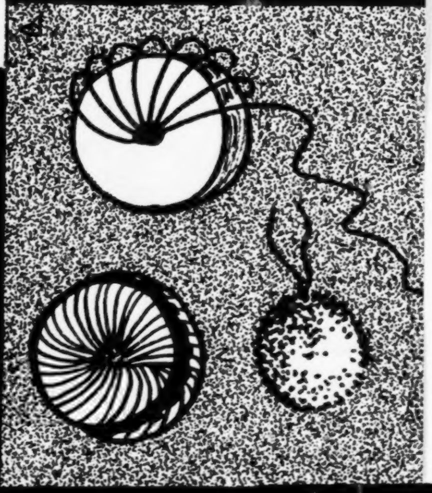
f. Smooth flexible plastic sheets come in brilliant colors and can be found in handcraft catalogs. Some stores carry them as notebook covers. Designs can be cut with scissors and suspended from nylon thread to form the popular dangling types of earrings.

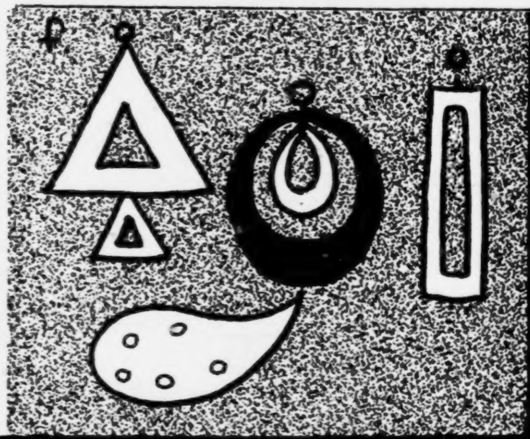
NOTE: All the above jewelry items need pins or clasps attached. Most variety stores carry them. In some cases small safety pins can be used.

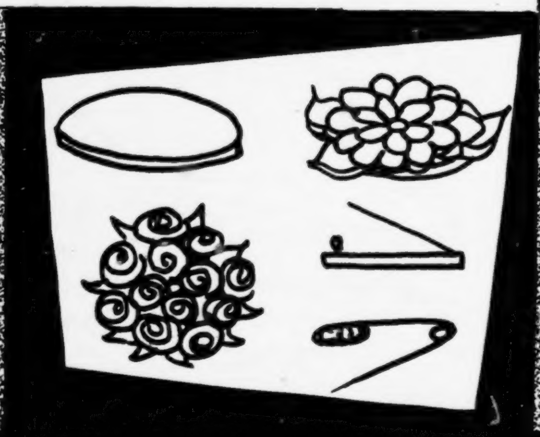


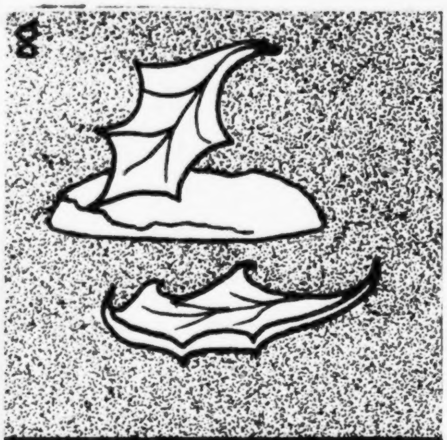


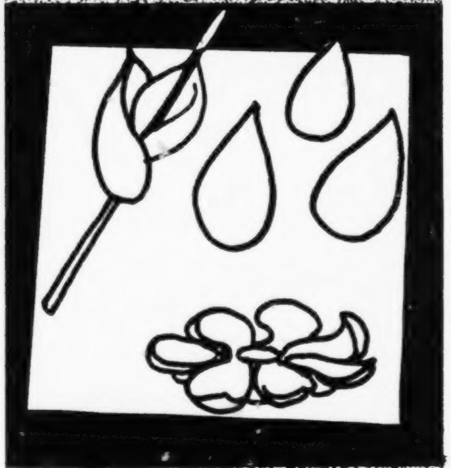


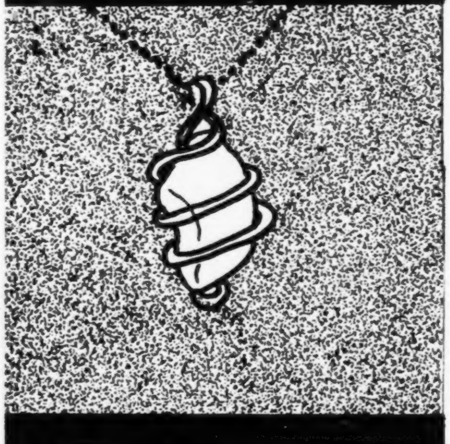


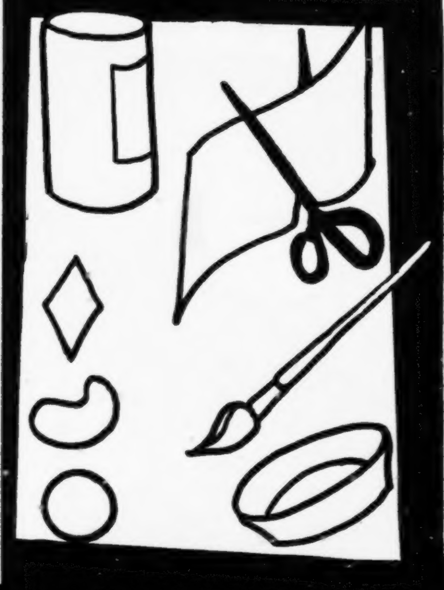












Jewelry . . .

g. Beautiful leaf pins result from placing a small leaf — vein side down — on a smooth, thin pat of clay. While still damp, cut out with a sharp point (nut-pick, scissor, paring knife, etc.) Shape gently by curling leaf edges upward gracefully. Dry, fire and glaze, or paint and shellac.

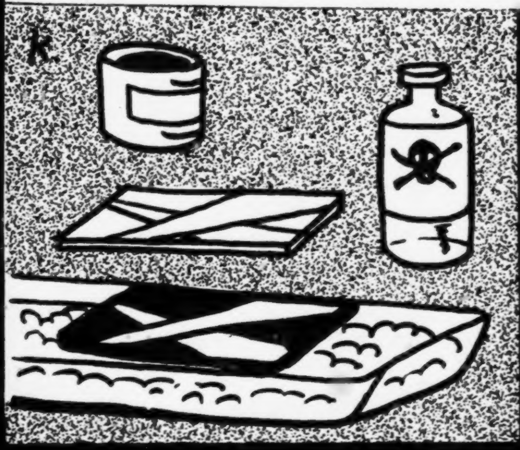
h. Petals on flowers are made from thin slices of clay cut in various sizes. Wrap the smallest ones first around a toothpick. Dampen each additional petal and increase the size as they grow from buds to blossoms. Remove by sliding the tooth pick out from the bottom. Cut off the end smoothly. Dry and color.

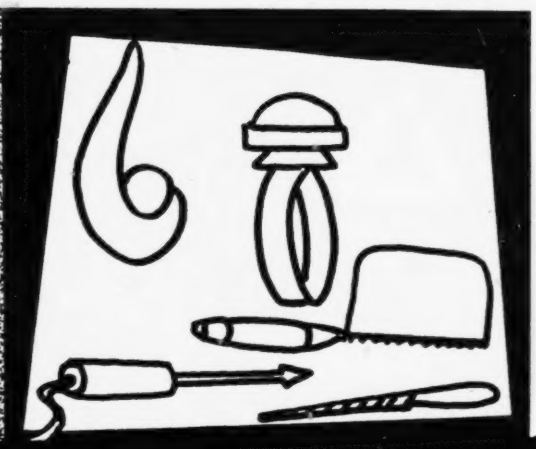
i. Using a flexible wire, wrap it around a pretty stone leaving a loop on the top for a small chain or ribbon to form a simple necklace or pendant.

j. Many food and drink containers are made from pure aluminum. This metal is very versatile because it can be cut with scissors in almost any shape. Bracelets are possible because of the flexibility and size.

k. Metal sheets can be cut to shape for advanced activities. Designs must be painted with asphaltum where a shiny effect is desired. Pieces are then immersed in a nitric acid solution where the unprotected metal is eaten away in this etching process.

l. Shaping jewelry from silver into pins, rings, etc., is recommended for advanced students only as it takes special equipment such as solder, saws, files, and takes special technical care in their handling. Good books are available on making silver jewelry in libraries and stores supplying handcrafts.





Papier Maché
Created
with NEWSPAPER + WHEAT PASTE
• BALLOONS
• PAPER PLATES
• WIRE ARMATURES
• LIGHT BULBS
• DISHES + BOWLS
• MAILING TUBES
• PAPER WADS
PLUS
Imaginatio

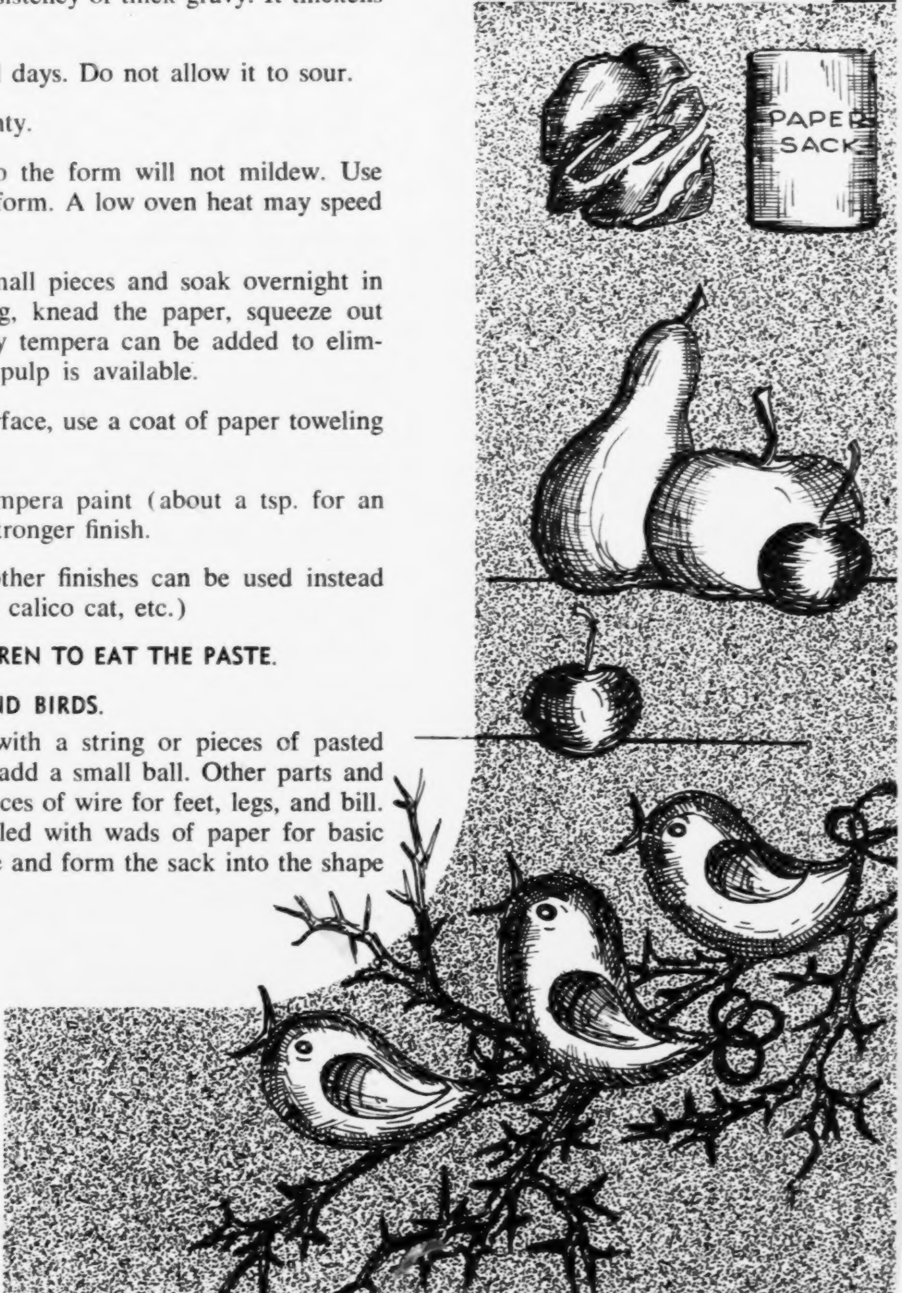
Papier Mache . . .

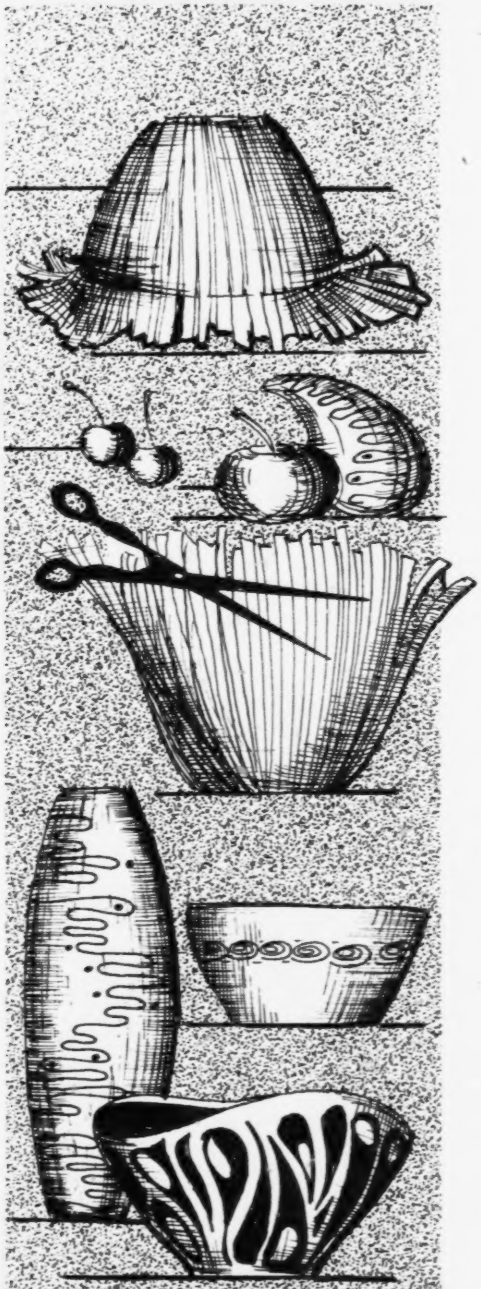
PAPIER MACHE is a combination of newspaper and wall paper paste to make three dimensional forms. Here are a few suggestions for using papier mache in strips, pieces, and pulp:

- Tear several thicknesses along the printed columns. Tearing is better than cutting because it develops coordination and finger dexterity. It also "melts" into a smoother surface.
- To mix paste: Pour warm water into a shallow pan. Sprinkle wall paper paste on top and mix well with the hands until smooth. It should be the consistency of thick gravy. It thickens as it stands.
- Paste can be kept for several days. Do not allow it to sour.
- Paste gives strength, use plenty.
- Drying must be regulated so the form will not mildew. Use DRY paper wads inside the form. A low oven heat may speed the drying.
- For pulp: Rip paper into small pieces and soak overnight in warm water. In the morning, knead the paper, squeeze out excess water, add paste. Dry tempera can be added to eliminate painting. Commercial pulp is available.
- To make a good painting surface, use a coat of paper toweling for finishing.
- Elmer's Glue mixed with tempera paint (about a tsp. for an average size item) gives a stronger finish.
- Colored paper, cloth, and other finishes can be used instead of paint. (Gingham dog and calico cat, etc.)
- **DO NOT ALLOW THE CHILDREN TO EAT THE PASTE.**

1. BALLS, SIMPLE ANIMALS AND BIRDS.

Wad paper tightly and secure with a string or pieces of pasted paper. Squeeze out the head or add a small ball. Other parts and features can be added. Insert pieces of wire for feet, legs, and bill. Paint. Use small paper sacks filled with wads of paper for basic forms. Coat the hands with paste and form the sack into the shape desired. Add detail and paint.





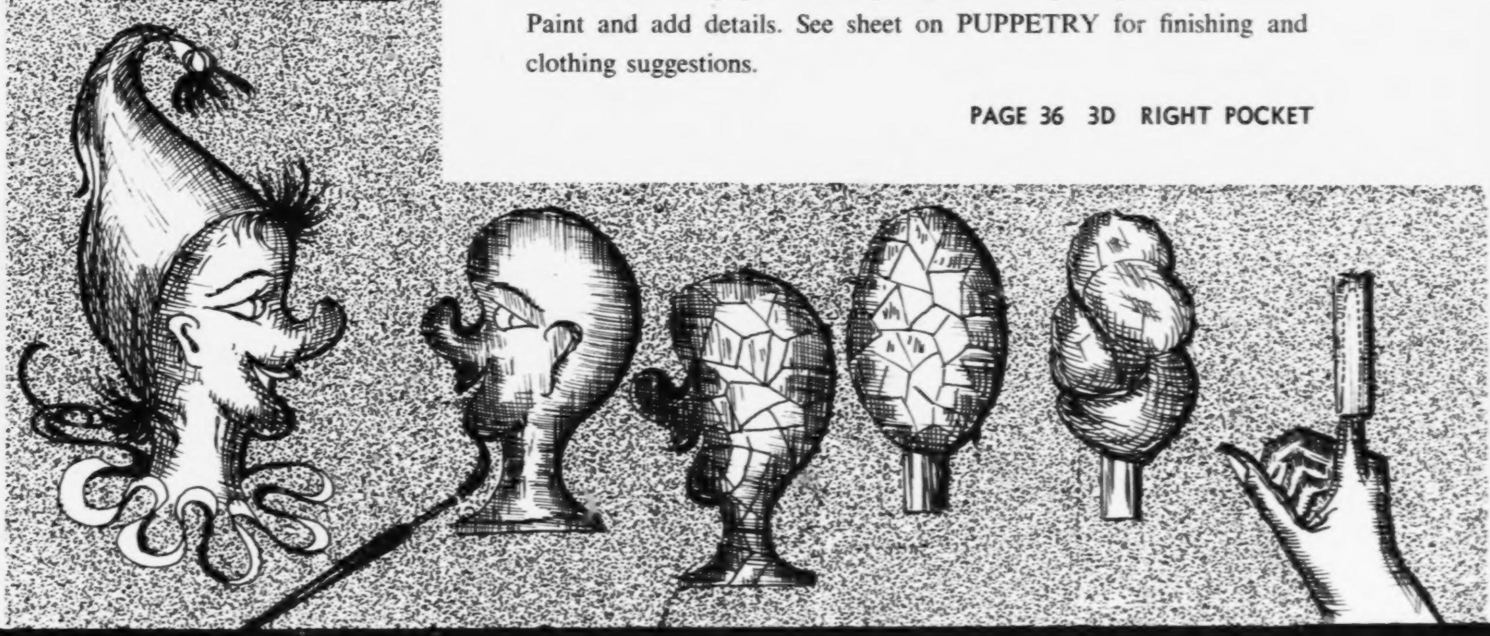
Papier Mache . . .

2. BOWLS.

For the form use a bowl of pleasing shape. Turn it up-side-down on a board and cover it well with overlapping strips of WET newspaper. Extend them well beyond the bowl. Begin to apply the pasted strips alternating vertical and horizontal directions for strength. Pull the strips tightly. The comic section can be alternated with plain newspaper to keep track of the number of layers. Use 8 to 10 layers for a medium size bowl. Use paper toweling for the final coat. Allow to dry. The paper shell will come off easily. Trim off strips using the bowl as a guide. After tearing out all the loose pieces, cover the inside with a coat of toweling using as little paste as possible. Carry the toweling over the edge to seal in the layers of newspaper. Paint and decorate. Use a printing technique or free brush style of decoration which is in harmony with the material. A relief design or pulp mixture overlay will challenge the talented pupil. These bowls could be used for decoration or to hold nuts or fruit. If they are sprayed with plastic or shellac, they could be used for pop corn, chips, or crackers.

3. PUPPET HEADS.

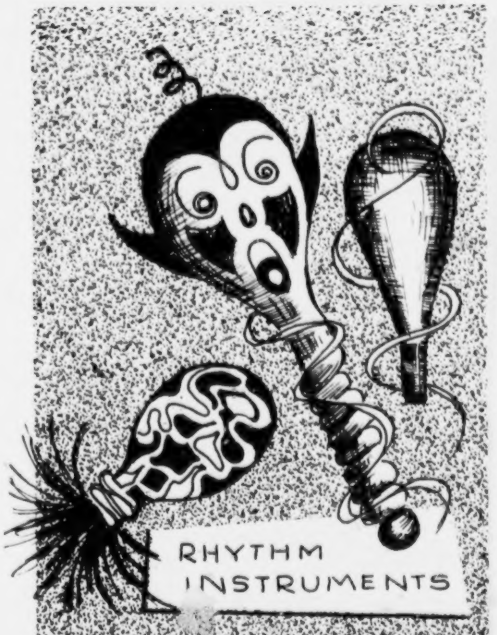
Roll a 3″ x 9″ strip of tagboard around your index finger for a finger stall. Paste end. Shape the head with wads of tightly crushed newspaper. Tie with string or make firm with strips of paper soaked in paste. Use wads of paper or paper pulp for the features. Several layers of pasted paper can be sculptured to form ears, beaks, etc. They can be attached to the head with narrow strips of paper as band aids. A final coat of paper toweling will make a good painting surface. Paint and add details. See sheet on PUPPETRY for finishing and clothing suggestions.



Papier Mache . . .

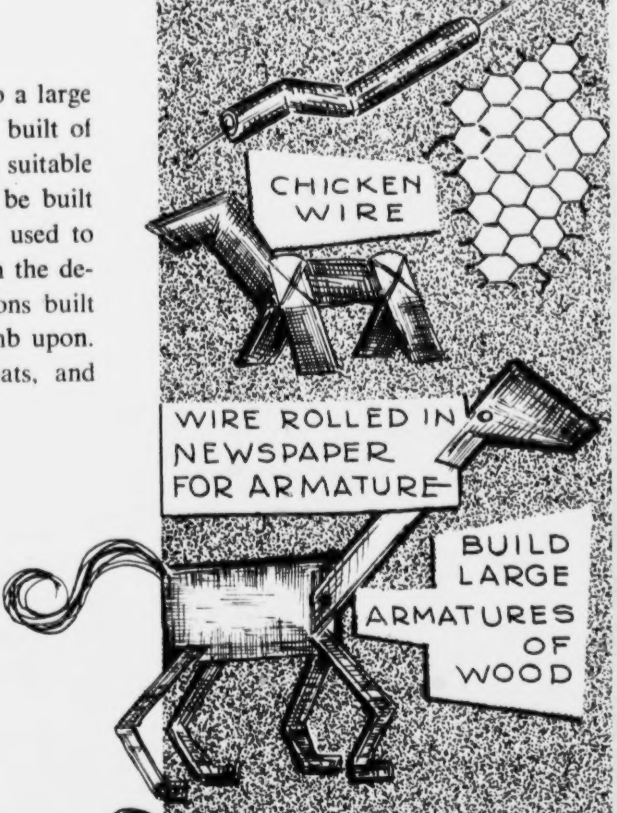
4. BURNED OUT LIGHT BULBS FOR MARACAS.

Rhythm instruments can be made by coating burned out light bulbs with paste and several layers of pasted newspaper strips and pieces. Allow to dry and make a hole in the cheek with a hammer and a screw driver. Insert several dry beans, stones, marbles, bits of glass, or gravel and cover the hole with several layers of paper. Cover with a layer of paper toweling. A string can be embedded near the bottom so the maraca can be hung in a decorative swag when not in use. Dry and decorate. Fringe, fur, yarn, or other material can be added to make the maraca into a fetish.



5. LARGER ITEMS BUILT ON ARMATURES.

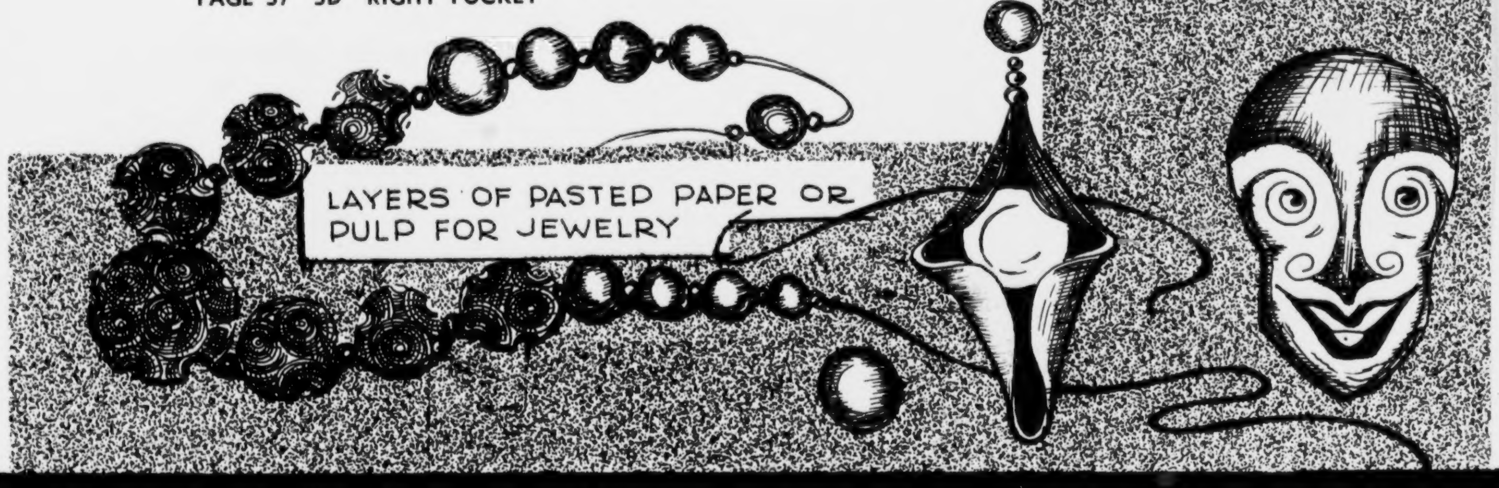
A length of wire rolled tightly in newspaper can be built into a large strong shape. Cardboard mailing tubes or a saw-horse form built of wood will make a sturdy armature. Chicken wire bent into a suitable shape will make a quick and easy form. Any of these can be built up with wads of dry paper tied securely with smaller wads used to fill out the form. Insert strips of cloth to add strength. When the desired form is reached, paint and decorate. Some constructions built on wooden armatures are strong enough for children to climb upon. These items can also be used for stage props, school floats, and mascots.

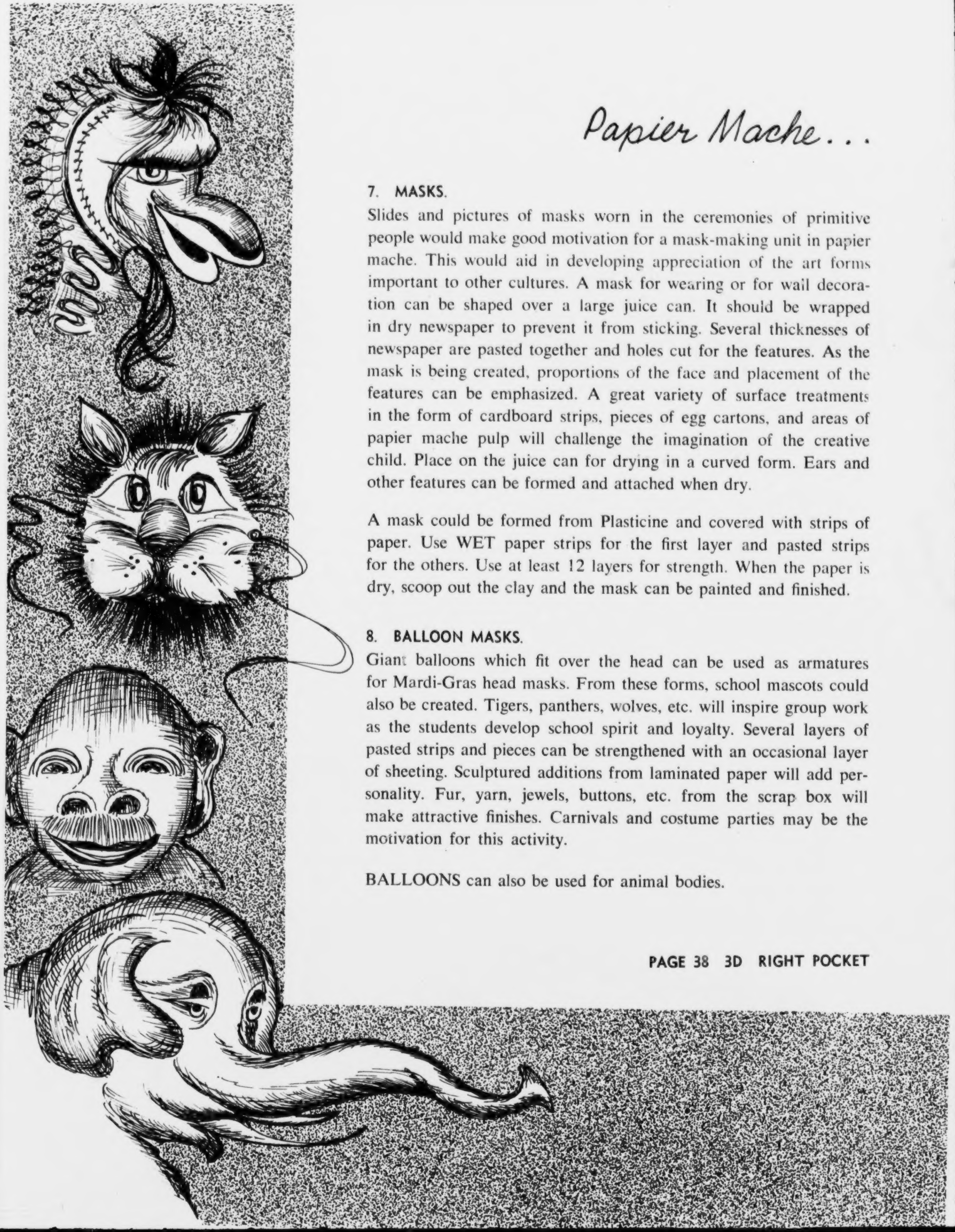

CHICKEN WIRE
WIRE ROLLED IN NEWSPAPER FOR ARMATURE
BUILD LARGE ARMATURES OF WOOD

6. COSTUME JEWELRY.

Exotic jewelry created from papier mache pulp and laminated pieces is a challenging project for the style-conscious girl. Beads, pins, earrings, bracelets, rings, and other items can be painted to match or contrast with her costume. This is a good opportunity for the student to develop good taste in costume accessories.

PAGE 37 3D RIGHT POCKET


LAYERS OF PASTED PAPER OR PULP FOR JEWELRY



Papier Mache...

7. MASKS.

Slides and pictures of masks worn in the ceremonies of primitive people would make good motivation for a mask-making unit in papier mache. This would aid in developing appreciation of the art forms important to other cultures. A mask for wearing or for wall decoration can be shaped over a large juice can. It should be wrapped in dry newspaper to prevent it from sticking. Several thicknesses of newspaper are pasted together and holes cut for the features. As the mask is being created, proportions of the face and placement of the features can be emphasized. A great variety of surface treatments in the form of cardboard strips, pieces of egg cartons, and areas of papier mache pulp will challenge the imagination of the creative child. Place on the juice can for drying in a curved form. Ears and other features can be formed and attached when dry.

A mask could be formed from Plasticine and covered with strips of paper. Use WET paper strips for the first layer and pasted strips for the others. Use at least 12 layers for strength. When the paper is dry, scoop out the clay and the mask can be painted and finished.

8. BALLOON MASKS.

Giant balloons which fit over the head can be used as armatures for Mardi-Gras head masks. From these forms, school mascots could also be created. Tigers, panthers, wolves, etc. will inspire group work as the students develop school spirit and loyalty. Several layers of pasted strips and pieces can be strengthened with an occasional layer of sheeting. Sculptured additions from laminated paper will add personality. Fur, yarn, jewels, buttons, etc. from the scrap box will make attractive finishes. Carnivals and costume parties may be the motivation for this activity.

BALLOONS can also be used for animal bodies.

Puppetry . . .

PUPPETRY IS A TEACHING TOOL WHICH IS EFFECTIVE AT ANY AGE LEVEL. The great variety of types and uses combine to make this one of the most valuable art activities. Remember: THERE IS NO RIGHT WAY OR WRONG WAY TO MAKE A PUPPET, THERE IS JUST A BEST WAY FOR EACH CHILD and he should be motivated to find HIS own best way.

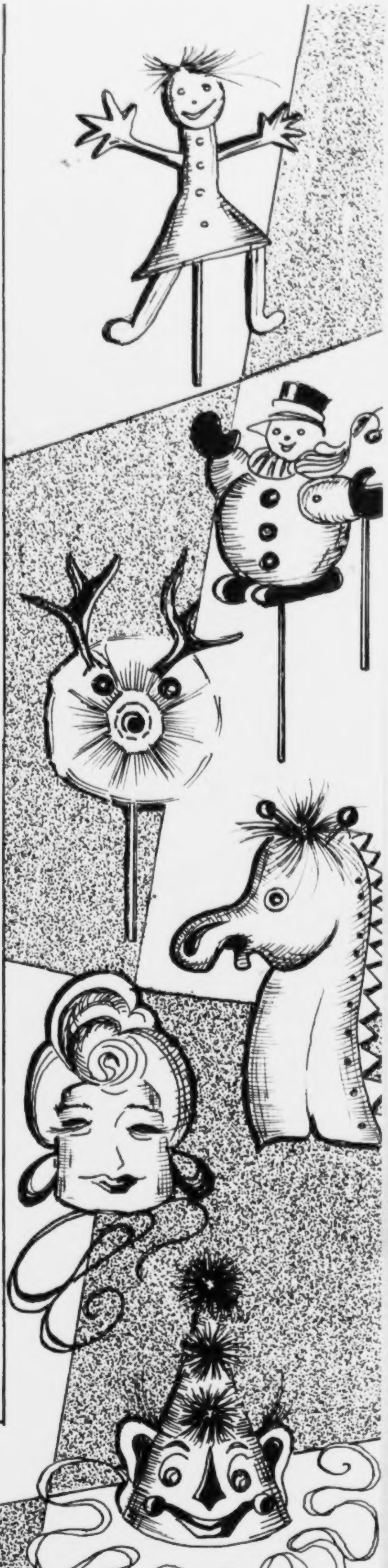
SIMPLE STICK PUPPETS.

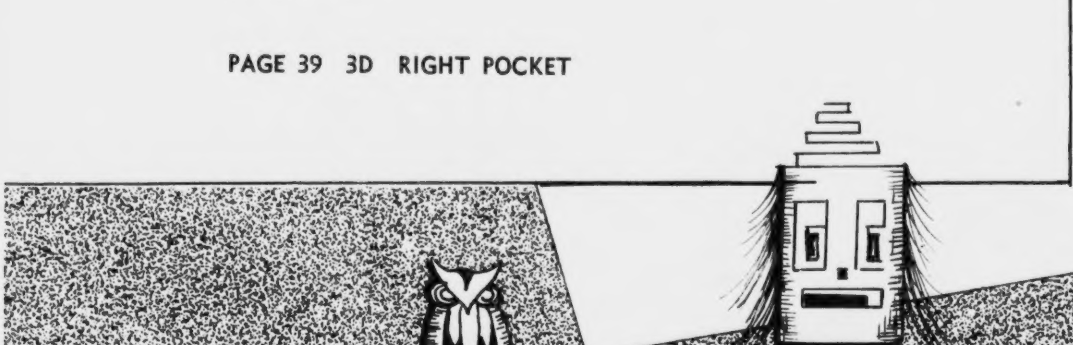
For simple puppets, a child's drawing or painting can be mounted on heavy paper, cut out, and fastened to a wire or stick and manipulated. Ask your shoe man to save the bamboo "shoe trees" which come in new shoes. These make ideal controls for puppets as well as good paint stirrers. If partial movement is desired from the puppet, that part can be cut out separately, being sure to allow for overlap. Attach this part to the figure with brass paper fasteners. A second stick can be fastened to this part so it can be manipulated by the child's other hand. This type of puppet can also serve as a shadow puppet.

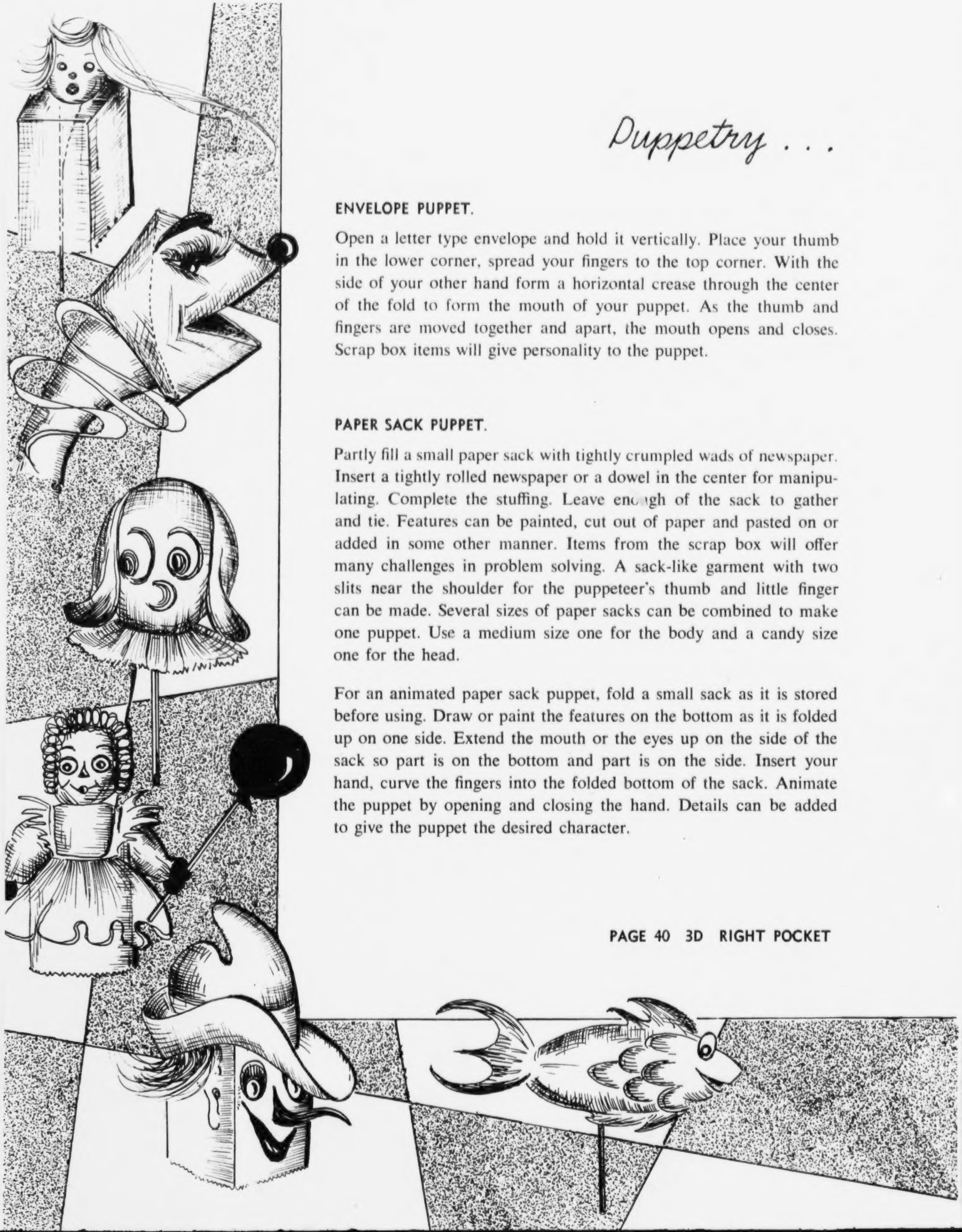
Attach a stick to a single depression of an egg carton and add features for a tiny puppet. Eyes, ears, nose, and other features can be added including pipe cleaner antlers, bead and sequin eyes, button noses, wire, whiskers, and fur scrap ears.

CARDBOARD BOX AND PAPER CUP PUPPETS.

Simple puppets can also be created from salt or cereal boxes, malted milk cartons, milk containers, and similar foundations. These can be covered with paper, painted, or covered with cloth scraps. When painting over a waxed foundation, use a few drops of liquid soap or whisk your brush over a cake of soap occasionally to make the paint adhere. Use items from the scrap collection: costume jewelry, ribbon, fur, yarn, buttons and other material to trim. Wear a long sleeve, glove, or "wrist skirt" while manipulating the puppet to detract from the nakedness of the arm. Such a skirt can be made from an old sleeve or a strip of cloth gathered with elastic to fit the puppeteer's wrist.







Puppetry . . .

ENVELOPE PUPPET.

Open a letter type envelope and hold it vertically. Place your thumb in the lower corner, spread your fingers to the top corner. With the side of your other hand form a horizontal crease through the center of the fold to form the mouth of your puppet. As the thumb and fingers are moved together and apart, the mouth opens and closes. Scrap box items will give personality to the puppet.

PAPER SACK PUPPET.

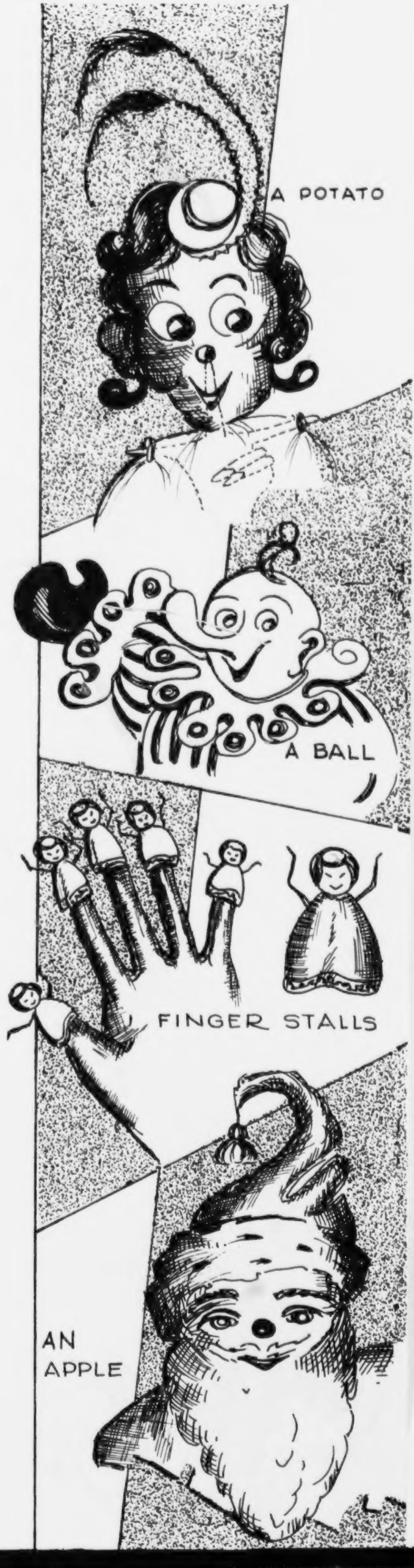
Partly fill a small paper sack with tightly crumpled wads of newspaper. Insert a tightly rolled newspaper or a dowel in the center for manipulating. Complete the stuffing. Leave enough of the sack to gather and tie. Features can be painted, cut out of paper and pasted on or added in some other manner. Items from the scrap box will offer many challenges in problem solving. A sack-like garment with two slits near the shoulder for the puppeteer's thumb and little finger can be made. Several sizes of paper sacks can be combined to make one puppet. Use a medium size one for the body and a candy size one for the head.

For an animated paper sack puppet, fold a small sack as it is stored before using. Draw or paint the features on the bottom as it is folded up on one side. Extend the mouth or the eyes up on the side of the sack so part is on the bottom and part is on the side. Insert your hand, curve the fingers into the folded bottom of the sack. Animate the puppet by opening and closing the hand. Details can be added to give the puppet the desired character.

Puppetry . . .

PUPPETS FROM A POTATO, APPLE, CARROT, ETC.

Use an apple corer or a knife to core an apple about half way up from the stem end. The index finger is inserted in the hole to manipulate the puppet. Beads or sequin discs on short pins, thumbtacks, buttons, jewels, etc. can be used to designate the features. Try building a nose from some of the core. The costume can be simple or fancy. A silk scarf or handkerchief over the hand before the head is put on will be an effective costume. Hands can be suggested by twisting rubber bands around the index and second finger close to the ends. A scarf, drapery, piece of fur, or other material can be used for head covering. Try a stretched-out chore girl. As a fruit or vegetable puppet will dry out quickly, it is short-lived. However, a "sprouted" potato makes a fantastic African warrior. Try making this type of puppet "on the spot" for the children. They will be delighted.

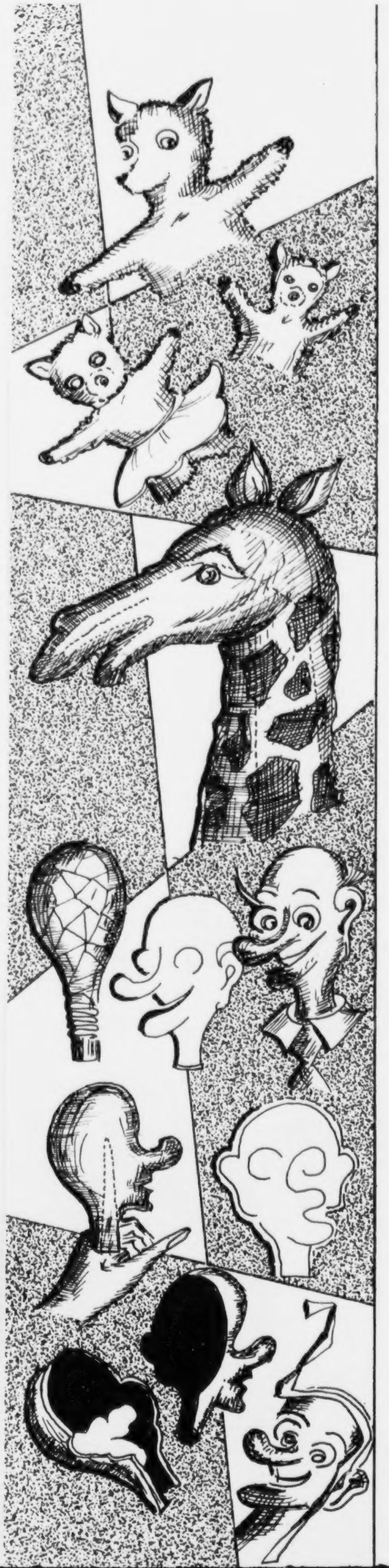


FINGER PUPPETS.

Little foam balls or tiny new potatoes are good for finger puppets. Make a hole to fit over the end of the finger. Make slip dresses in the shape of an inverted thimble or cut off the fingers from a pair of discarded gloves. Short pieces of wire or pipe cleaners can suggest the arms. A few strands of yarn attached with a drop of glue will suggest hair. A tiny feather on the head and a few appropriate details can make a charming set of "Ten Little Indians" from these finger puppets.

Little "finger stalls" may be knitted or crocheted and decorated as finger puppets.

Small drawings could be cut out and pasted on heavy paper and fashioned into a finger ring. Illustrate a story with these tiny finger puppets.



Puppetry . . . .

MITTEN PUPPETS.

Have the child trace around his hand while he keeps the middle fingers together. These will make the head and the thumb and little finger will serve as hands. Cut out this pattern and pin it on cloth. Cut out allowing for seam and sew according to the ability of the child. Use paper wads, cotton or nylon hose for stuffing. Add details by stitchery, painting, or pasting.

SOCK PUPPET.

An old sock makes a fantastic animal, dragon, serpent, or fish puppet. Place fingers in the toe and the thumb in the heel. Bring together and open and close to work the jaws. Half of the foot can be pushed between the fingers and the thumb to make a throat and the mouth can be opened wide. Applique contrasting material to the inside of the mouth. Add tongue, teeth, eyes, and other details. This type of puppet is similar to the Sheri Lewis ones. They are the most successfully animated puppets because their mouths are easily synchronized with the voice of the puppeteer.

PAPIER MACHE PUPPETS CONSTRUCTED ON A FORM.

A few coats of papier mache strips and pieces can be layered on a discarded light bulb. Do not cover the metal part. When the paper is dry, pound off the metal end and take care in covering the broken glass with narrow strips of pasted paper carrying them well up inside the bulb. TAKE CARE. Do not allow the young child to do this. Add features with pulp and sculptured paper. Dry, paint, and add details. The costume may be made from an old dress or a shirt sleeve. It may be simple or elaborate. Be sure the costume allows free movement.

The head could be modeled with Plasticine clay over the index finger. Coat with vaseline and then with papier mache strips. Dry and cut in half behind the ears. Scoop out the clay, put the halves together with narrow strips of pasted paper. A ridge for the shoulders can be added at the base of the neck to fasten clothing more securely. Clothing could be pasted on. Use elastic or rolled paper coils at the wrists to make the fingers snug and aid in the manipulation of the puppet.

Staging A Show . . .

Puppets can be used without stages but if you want an audience type show, some type of a stage is necessary. It can be simple or elaborate depending on the ability of the children who are giving the show.

Use a DESK or a TABLE as a stage. Cover the front and ends with a blanket or sheet to conceal the puppeteers. Turn the table on its side with the top facing the audience. Put a table leaf or a board over the top legs to serve as a stage. Puppeteers sit, kneel, sit on the floor or on low stools. A table in a doorway allows for suspending a back drop of paper or cloth.

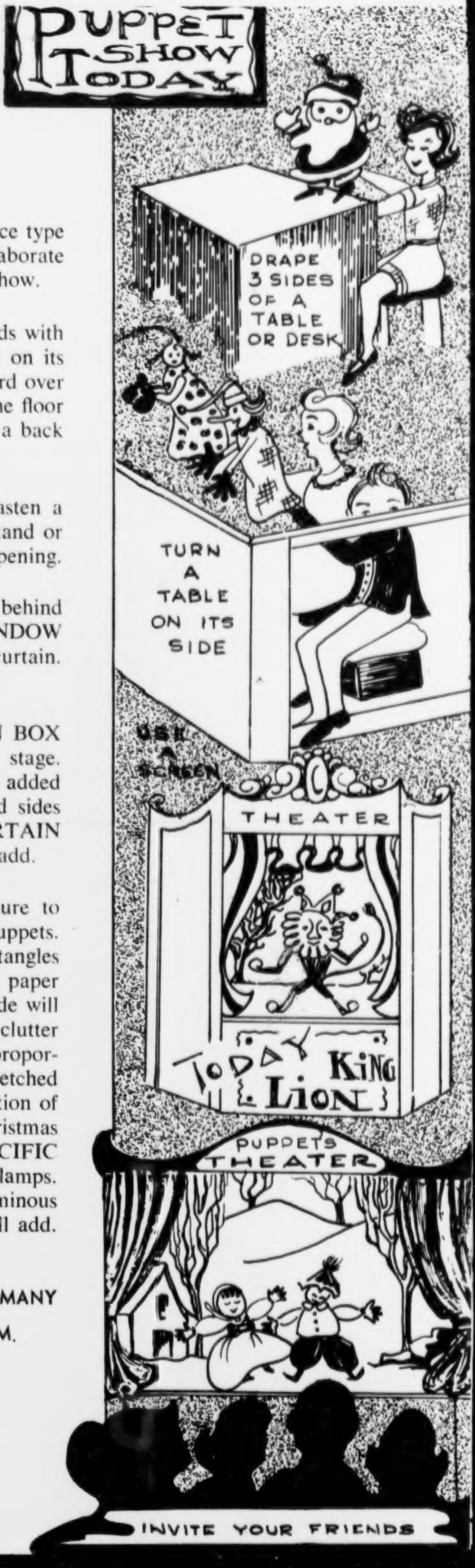
Cut an opening in the center panel of an old SCREEN. Fasten a board for a stage, add curtains and decorations. Puppeteers stand or sit behind the screen and lift the puppet up to show in the opening.

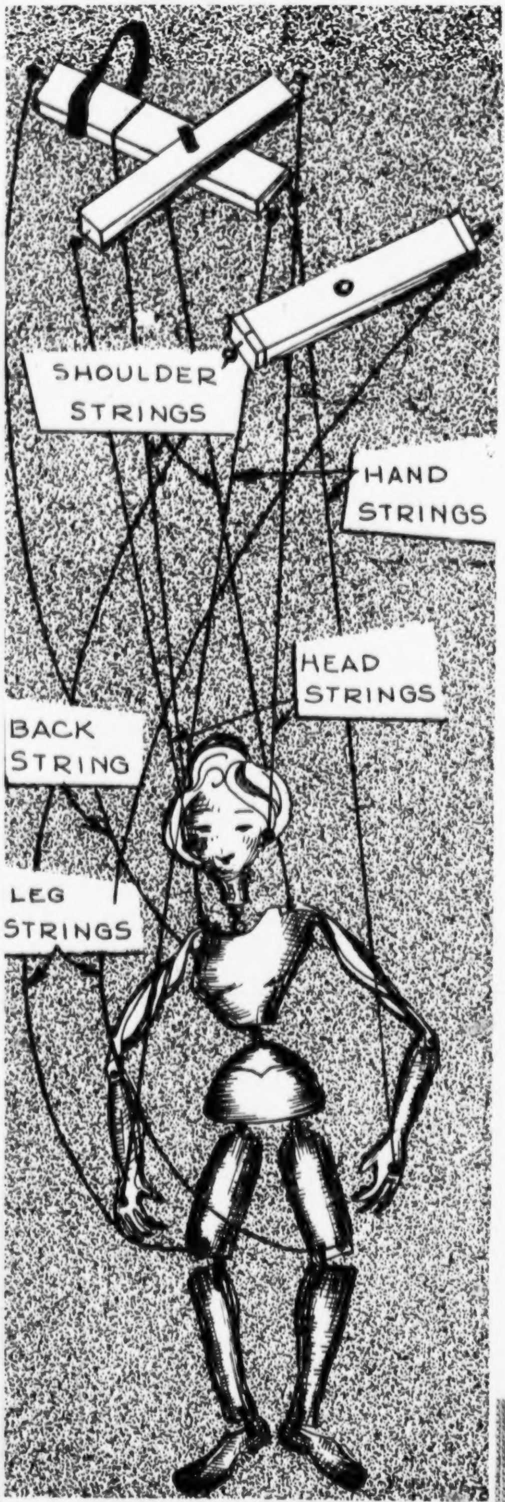
For outdoor summertime shows, puppeteers can perform behind a HEDGE or a FENCE. A BASEMENT or a LOW WINDOW could frame the show. A window shade could serve for a curtain. The audience could sit on the lawn and watch.

Cut the bottom out of a large CARDBOARD or WOODEN BOX for a more permanent type theater. Use the bottom as the stage. Manipulate the puppets from below. Legs of wood could be added to each corner. DRAPERY can be put around the front and sides to conceal the puppeteers as it adds to the appearance. A CURTAIN pulled by hand or manipulated with traverse drapery rods will add.

SCENERY will add to the reality of the production. Be sure to keep it simple so it does not detract from or interfere with the puppets. A few trees will suggest a park and a few overlapped rectangles will suggest the buildings on a city street. Poster paint, chalk, paper cut outs on wrapping paper, tag board, muslin or window shade will be effective. For some productions, drapery is best. Do not clutter the stage with PROPS. Be sure to keep them simple and in proportion to the puppets. Some can be hung by strings from a wire stretched from overhead. Be sure the props do not interfere with the action of the puppets. GENERAL LIGHTING can come from Christmas tree lights used as foot lights or around the opening. SPECIFIC LIGHTING can come from spots, flash lights, or goose neck lamps. Gelatin wheels and covers of tissue paper give "mood". Luminous paint will give a "spooky" effect. APPROPRIATE MUSIC will add. Children will enjoy experimenting with SOUND EFFECTS.

THE PRODUCTION OF A PUPPET SHOW WILL INCORPORATE MANY ART EXPRESSIONS. STRESS PUPPETRY AS HISTORIC ART FORM.





Marionettes...

A MARIONETTE is a puppet which is manipulated by strings. It can be simple or it can be extremely complicated. Some hand-carved wood marionettes are rare works of art which have found places of honor in museums throughout the world.

Simple marionettes can be jointed figures of cardboard or cloth stuffed with cotton and equipped with strings.

For more complicated marionettes, papier mache heads and wooden dowel bodies can be combined or the entire figure can be carved from wood. If easily carved balsa wood is used, a core of hard wood must be inserted in places to hold the screw eyes. Loosely jointed parts: head, torso, hips, upper arms, lower arms, upper legs, lower legs, and feet are assembled with screws or strips of leather for flexibility. Hips, feet, and hands should be weighted with sheet lead, solder, sinkers, or shot for effective manipulation.

The control bars could be made of 2″ pine batten. Stringing can be done similar to the illustration or it could be greatly simplified. Begin at the shoulders with a 45″ long string. This will guide the length and balance of the other strings. Other ways to string can be explored. Whatever clothing is used, it must not interfere with the free movements of the marionette.

IT TAKES MUCH PRACTICE TO MAKE A MARIONETTE BEHAVE WELL. Standing in perfect balance is the basic position and is accomplished when the right hand picks up the foot bar and the left hand holds the control with fingers between the head bar and the shoulder strings. Walking, bowing, turning the head, raising the hands, sitting, and crawling can be accomplished by varying the tension on the control strings. SKILLFUL CONTROL TAKES PRACTICE.

Stitchery . . .

MATERIALS AND TOOLS: Begin with heavy yarn. Then introduce string, thread, twine, variety yarn, metallic, lace, ribbon, ravelling, braid, beads, buttons, and other materials to provide a greater challenge. Begin with loosely woven fabrics as burlap or monk's cloth. Advance to coarse nets, plastic bags, screening, canvas, huck toweling, gingham, and finer weaves. Velvet and satin and similar materials will challenge talent. Coarse tapestry needles are best for beginners. When skill develops, introduce finer ones. Scissors, embroidery hoops, frames, and a pressing iron will help.

USES FOR STITCHERY: Encourage good taste in the creation of pictures, wall hangings, costume and home embellishment. Whenever possible, relate stitchery as a historic art form. This will develop appreciation.

BASIC STITCHES TO COMBINE AND USE CREATIVELY:

1. **RUNNING STITCH**: Run the needle in and out to form a stitch. Vary length, spacing and direction.

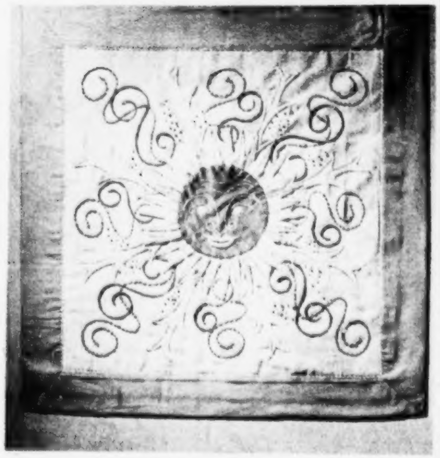
2. **THREADED STITCH**: Weave a second stitch through a running stitch. For variety, use combinations of colors, weights, and types of threads.

3. **COUCHING STITCH**: Pin a thread or group of threads on top of the fabric. With threaded needle, over sew the first thread with small stitches to secure. Variations in type, color, weight, and direction of stitches can be explored.

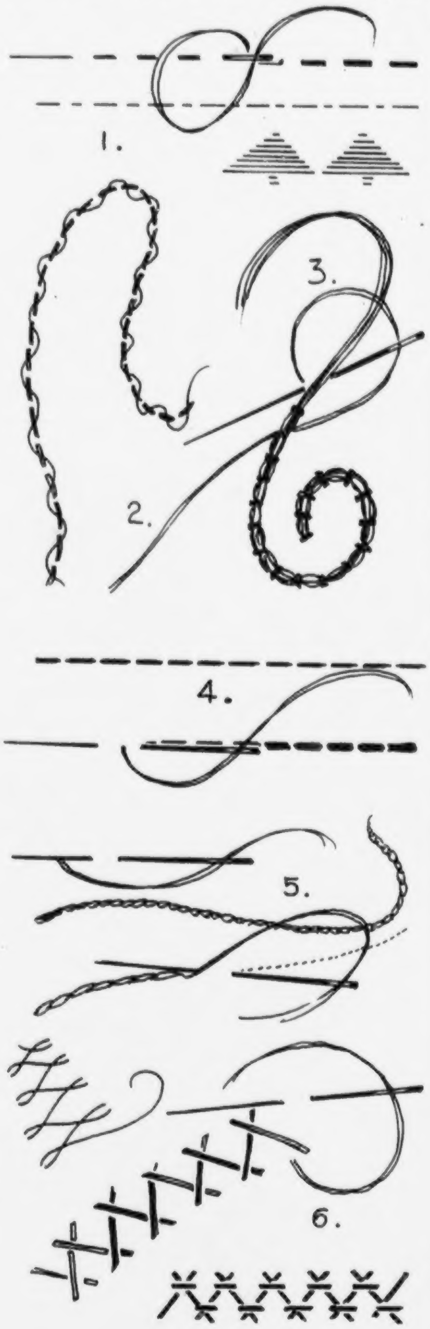
4. **BACK STITCH**: Work from right to left. Stitch one stitch. Insert the needle at the beginning of the stitch and bring out a stitch ahead. Repeat, The back stitch resembles machine stitching.

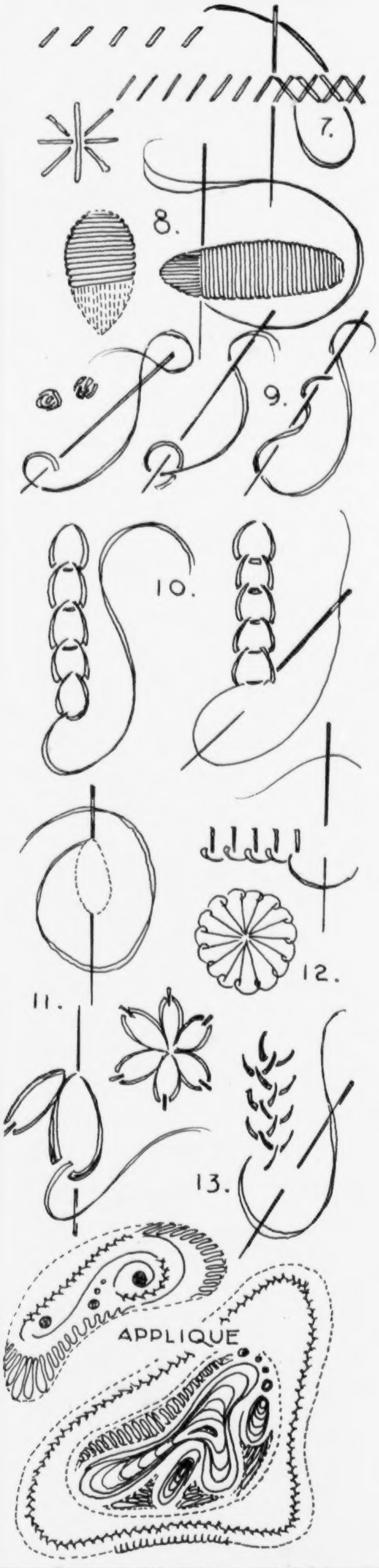
5. **OUTLINE STITCH**: Stitch from left to right. Keep the thread either ABOVE or BELOW the needle at all times. Stitch a back stitch and bring the needle out where the last stitch went in. Vary by making the stitches in a curve, leaving spaces, combining directions, and using different colors and thread.

6 **HERRINGBONE STITCH**: Work from left to right along two marked or imagined lines parallel or not. Begin by bringing the needle out on the line at the lower left, take a short back stitch a bit to the right on the upper line. Keep the thread UNDER the needle. Take a back stitch on the lower line a bit to the right with thread ABOVE the needle. Repeat. Keep spaces even. The crosses may be secured with running stitches.



SOUTH DAKOTA, SUNSHINE STATE STITCHERY AND APPLIQUE





Stitchery . . .

7. **CROSS STITCH**: Work from left to right or right to left keeping the needle in perpendicular position. Make a row of evenly spaced slanting stitches of equal length. Work back in the opposite direction in the same way.

8. **SATIN STITCH**: Stitches are made very close together over and over to fill an area solidly. Slant the needle slightly to keep the stitches straight. This stitch can be done over a padded area or in opposite directions to give a raised effect.

9. **FRENCH KNOT STITCH**: Bring the needle up. Wind the thread around the needle two or three times with the fingers of the left hand. Insert the needle close to the place it came out. Adjust tension of the thread with the left hand as the needle is inserted into the fabric.

10. **CHAIN STITCH**: Bring the needle up from the back. Insert it in the same place. Take a stitch as the thread is kept UNDER the needle. Draw it up making a loop. Insert the needle again and repeat.

    OPEN CHAIN OR LADDER STITCH: Stitch on parallel lines. Bring the needle out on the left, insert it on the right. Keep the thread UNDER the needle and bring the needle out on the left side below the first stitch. Insert on the right keeping the loop UNDER the needle. Bring the needle out on the left side and repeat.

11. **LAZY DAISY STITCH**: Begin as chain. Insert needle just outside or below the loop to hold it. Bring the needle out to make the next stitch. Vary loop and stitch in length, spacing, and direction.

12. **BLANKET STITCH**: Work from left to right. Needle is brought out on the line, take an upright stitch to the right with the needle pointing down. Keep the thread UNDER the needle. Try variations.

13. **FEATHER STITCH**: Bring the needle up. With thread UNDER the needle and the needle slanting, make one blanket stitch to the right of the straight line. With thread UNDER the needle, make a stitch to the left. Repeat. Try grouping and other varieties.

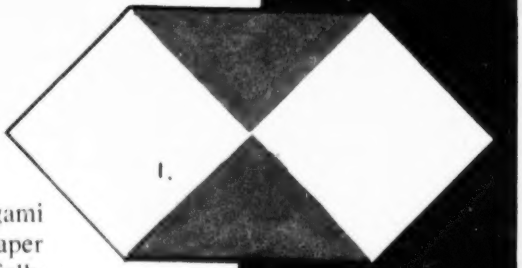
APPLIQUE PROCESS: Lay a piece of fabric upon a larger piece. The edges of the top piece may be left raw and held down with running stitches or finished with a hemming stitch. Stitches may be invisible or decorative. As the process allows for variety in fabrics, shapes and sizes and any type of stitching, unlimited effects can be achieved. For a reverse applique, the opening may be cut in the larger piece and another piece under the hole. Edges can be finished or not and many approaches to decorative stitchery should be explored.

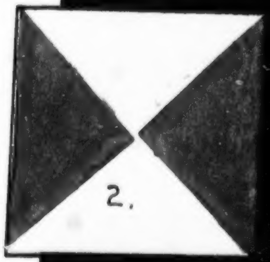
Origami . . .

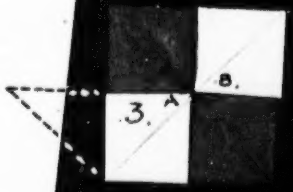
ORIGAMI calls for simple tools and materials: squares of Origami paper, a flat surface for folding and 10 eager fingers. Origami paper comes in squares of different sizes. It is hand made, often beautifully hand printed, and comes in a variety of exotic colors. It can be purchased in stores which sell imported art supplies or from gift or novelty shops. Onion skin, typing, and stationery type paper could be used but nothing can take the place of genuine Origami paper.

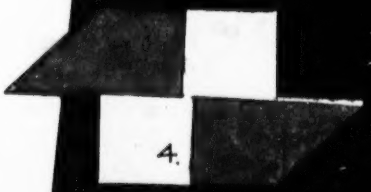
PIN WHEEL (illustrated in the right panel)

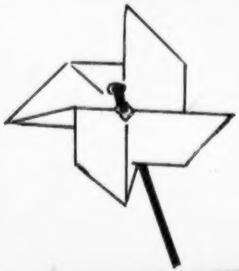
- Start with a square. Find center by folding vertically and horizontally. Fold 2 diagonal corners to center as in Diagram 1.
- Fold remaining 2 corners back as Diagram 2.
- Repeat these steps to obtain Diagram 3.
- Pull points A and B out to make Diagram 4.
- Pull out other 2 points. Make a hole in center, mount on a stick or a pencil.







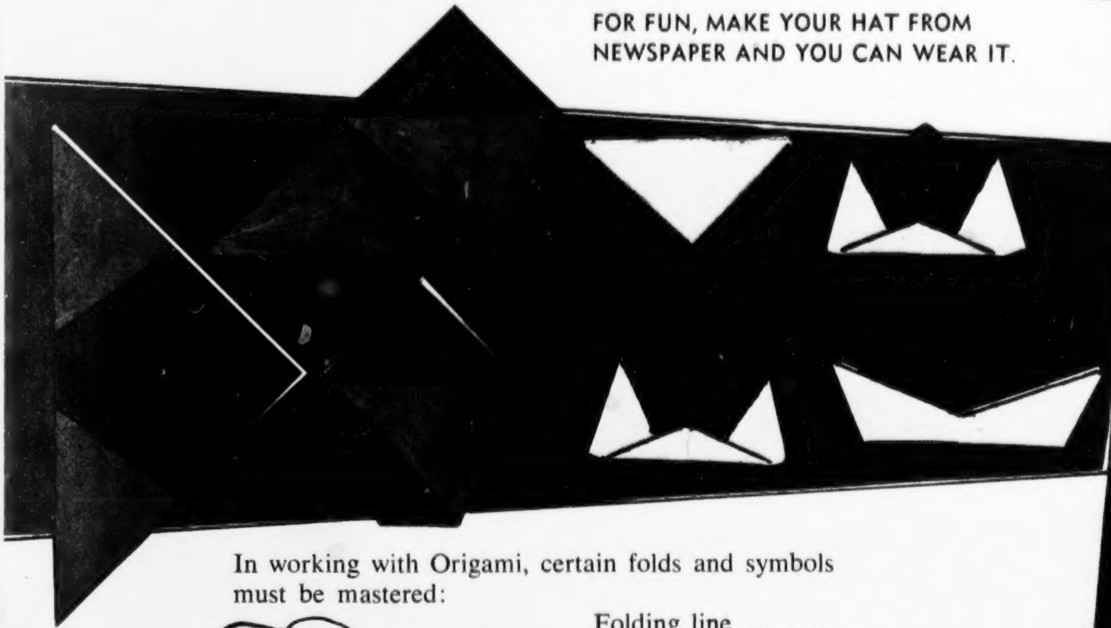


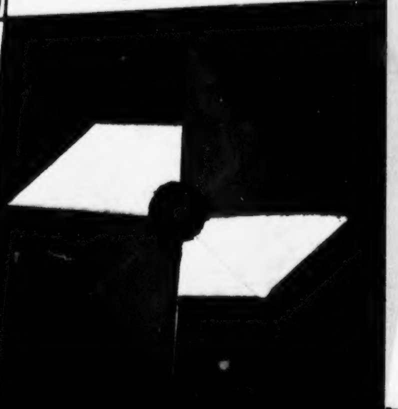


CUP and HAT (illustrated below)

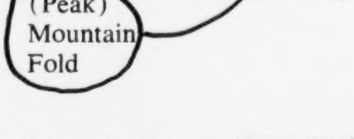
- Begin with square, use diaper fold, Diagram 1.
- Fold right side toward you on dotted line as Diagram 2. Fold left side back as Diagram 3.
- **CUP**: Tuck triangle A inside as in Diagram 4.
- **HAT**: Put thumb in opening and pull apart to make flat as in Diagram 5. Fold bottom up.
- Draw brim out at left and right as Diagram 6.

FOR FUN, MAKE YOUR HAT FROM NEWSPAPER AND YOU CAN WEAR IT.

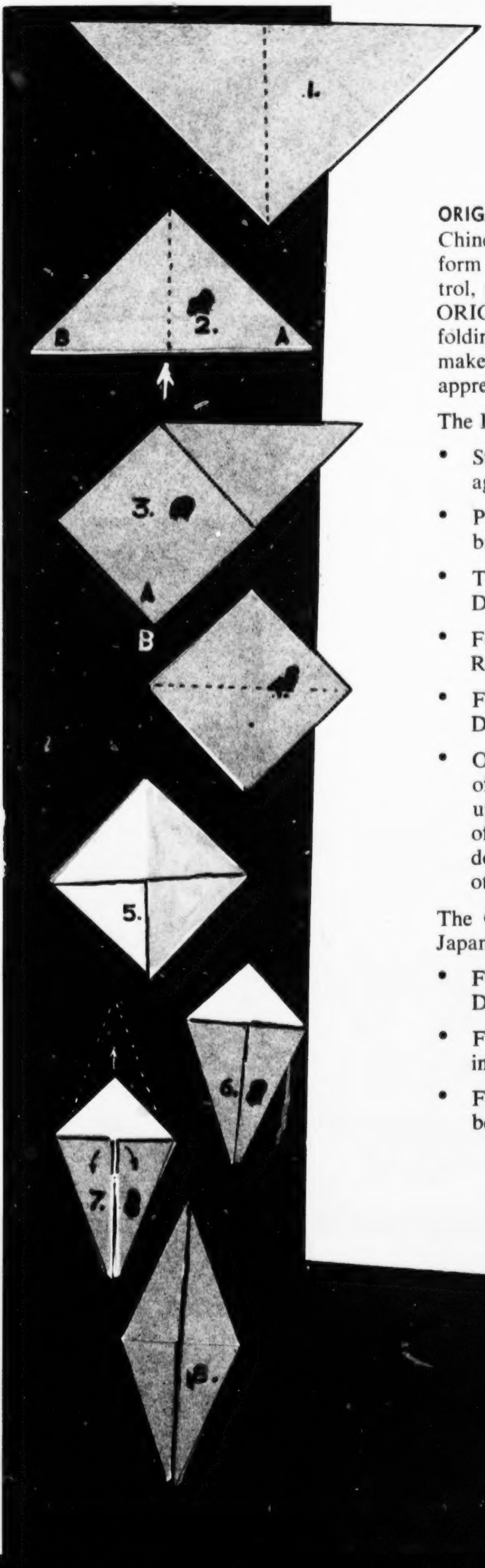




In working with Origami, certain folds and symbols must be mastered:



Folding line - - - - - -



Origami . . .

ORIGAMI is the art of paper folding which has been known to the Chinese and the Japanese as long as paper itself. This unique art form relies on the beauty of simplicity and precision. Patience, control, perseverence, and skill in following directions are important in ORIGAMI. The mental discipline developed through mastery in folding will become a motivation for imaginative use of paper. It makes an intriguing hobby and it will develop an understanding and appreciation of art forms of others.

The BASIC FORM (illustrated in the left panel)

- Start with a square. Make a diaper fold as in Diagram 1. Fold again as in Diagram 2.
- Pick up the top sheet at the arrow, turning outward and over, bringing point A to meet B as in Diagram 3.
- Turn the paper over, repeat step 2 on the reverse side as in Diagram 4.
- Fold outside bottom layers up on the dotted line as in Diagram 5. Repeat on other side.
- Fold corners C and D to the center. Turn over and repeat as in Diagram 6.
- Open the top layer and hold the lower section with one finger of the left hand over center line. Gently bring point A out and up to the peak formed by the dotted lines turning outside edges of the paper inward at the same time. When the edges are creased down, a perfect diamond shape should result. Repeat on the other side to have Diagram 8.

The CRANE (bottom panel) is considered very lucky and every Japanese child folds paper ones. Begin with BASIC FORM, see 8.

- Fold side corners into center line, turn over and repeat for Diagrams 1 and 2.
- Fold lower points up turning them inside out at the same time as in Diagram 3.
- Fold head at P. Spread wings. Blow air into the hole at the bottom to spread crane.

Weaving . . .

WEAVING should be more than the interlacing of threads. It should be a personal approach to an art form which involves thinking, drawing and constructing with materials into an aesthetic whole. The process can be described as the interlacing of threads at right angles to each other. The WARP are the lengthwise threads and the WEFT are the horizontal threads woven through the warp. Variations in types of threads, introduction of nature materials and methods of their use will give individuality to the weaving.

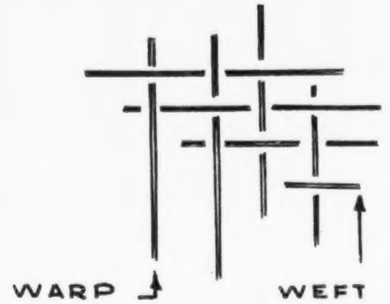
BEGIN WITH PAPER where the development of techniques in the weaving process can be developed progressively from kindergarten through college. Unlimited types of paper can be used alone or in combinations as the weaver develops a variety of artistic and intricate expressions with superimposing, accenting, sculpturing and decorating. Try variations in cutting the mat and strips.

TRY DRINKING-STRAW WEAVING. Cut several straws in half and stick a string (carpet warp) through each straw. Tie ends together and put under a heavy book or weight. Push each straw close to the knot and begin the finger weaving with heavy yarn. As the weaving progresses, it is pushed up and off the straws which free it for more weaving. When the strip is the desired length, slide the straws off and weave the end warp strings together. More than one warp string could be introduced for variety. This type of weaving could be used for curtain loops, head bands, belts, or sewn together for larger articles.

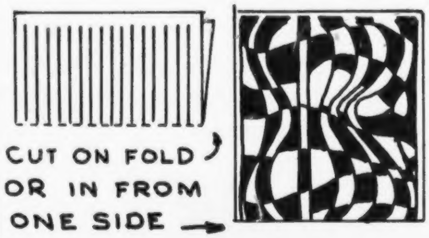
SCRIM OR RUG CANVAS is stiff enough to hold its shape without a frame. Draw a design with a crayon or felt marker directly on the canvas, hold the pattern under the canvas, or weave spontaneously without a pattern. Use heavy yarns and tapestry needles. Combinations of techniques and materials will add variety and interest.

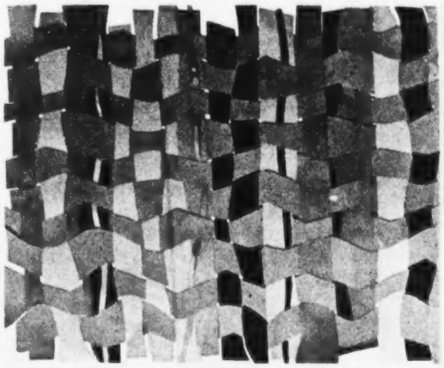
COTTON MESH as curtain materials, onion bags, and dish cloths are flimsy and need to be stretched on a frame. A piece of heavy cardboard could be inserted into the mesh bag to hold it firm and to prevent weaving through the second thickness. Grasses, dried flowers, raffia, reeds, ribbons, pipe cleaners, cellophane strips, and a variety of other materials used with tassels, lacings, loops, etc. will challenge a creative weaver.

IDEAS FOR WEAVING CREATIVELY



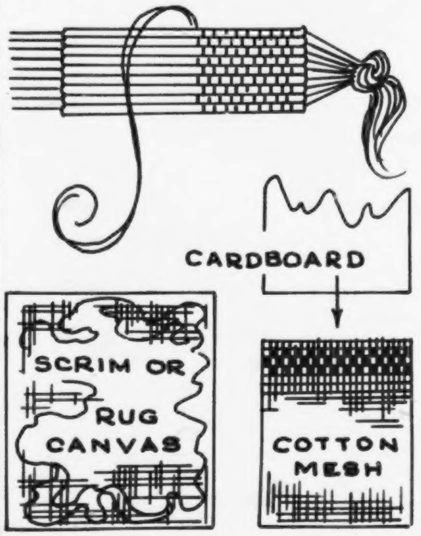
BEGIN WITH PAPER . .

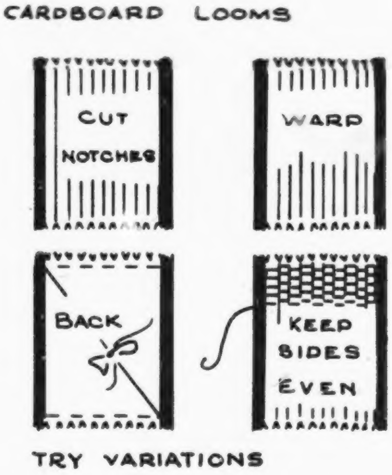


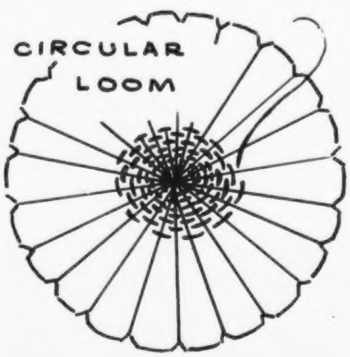


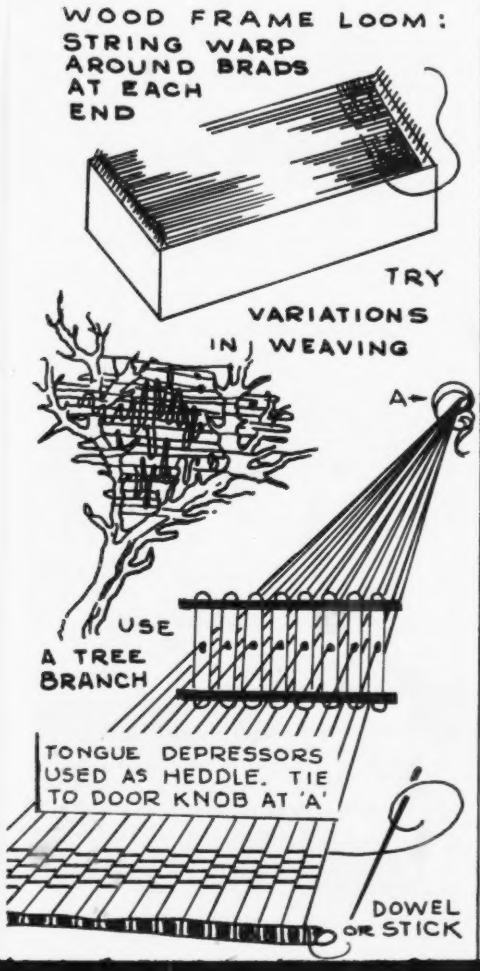
SHOWING VARIATIONS IN CUTTING WARP AND WEFT, COLORS, TEXTURE & STYLE

DRINKING STRAW WEAVING








WOOD FRAME LOOM: STRING WARP AROUND BRADS AT EACH END
TRY VARIATIONS IN WEAVING
A
USE A TREE BRANCH
TONGUE DEPRESSORS USED AS HEDDLE. TIE TO DOOR KNOB AT 'A'
DOWEL OR STICK

Weaving . . .

BURLAP from washed potato sacks or colorful commercial type woven with open areas, drawn threads, ravellings, texture yarns, applique — and many nature materials will make unusual weavings.

WIRE MESH such as window screens, hardware cloth, or chicken wire will be cut with wire cutters. Bind the exposed ends with tape to prevent scratching. Draw a design with felt marker or weave spontaneously either in two or in three dimensions. Allow the characteristics of the mesh to determine the form the weaving should take. Unwoven areas, areas sprayed with paint, materials, and techniques will make this type of weaving unique.

CARDBOARD WEAVING. Make a loom from heavy cardboard in the size of the finished article. Draw lines ½″ apart or according to the weight of the yarn to be used. To warp: fasten an end of the warp to the back with tape, bring to the front and wind back and forth, end to end, until all notches are looped. Carry the warp to the back and tie to the beginning end. Begin weaving with fingers, tapestry needle, or a tongue depressor (with a hole cut for threading yarn). Watch the tension so the weaving is kept even. Use a ruler, comb, or stick as a beater. Weave ends in and slip off loom. For circular articles use a CIRCULAR LOOM. Cut an uneven number of notches evenly spaced around the edge. Pull warp through these and through the center hole. Weaving can be done on one or both sides. Regulate tension to keep the work flat.

WOOD FRAME WEAVING. Use a picture frame, oil painting stretcher, forked tree branch, folding chair turned upside-down or a frame built of 4 strips of wood fastened at the corners with brads or metal fasteners. Drive a row of small brads evenly spaced along the ends. Tie the warp around the first nail, stretch to the first on the opposite end, back to the second nail until all the nails are looped. Try an imaginative approach in weaving. Use open spaces, geometric areas, textures, and additional materials. Dowels can be inserted to raise and lower warp threads. Fruit crates make good looms.

USES FOR WEAVING. In the home: Insert dowel through the loops of warp when removed from the loom and use it for a hanging. Small metal weights sewn to the bottom will keep it straight. Use as a room divider. Pillow tops, lamp shades, covers, afghans, and decorative accessories use the weaving well. For wearing: Purses, bags, mufflers, belts, head bands, and decorative trims will make appropriate use of the weaving. Doll clothes and coverlets will motivate the younger weaver.

Paper Sculpture . . .

PAPER SCULPTURE is the art of forming in relief, intaglio, or in the round by cutting, folding, bending, and manipulating paper.

MATERIALS AND TOOLS.
Begin with easily attainable, inexpensive, easy to manipulate paper such as wrapping, newsprint, construction, poster, typing, mimeograph, writing, shelf, and manila. As the child develops skills, use tag board, light weight cardboard, gift wrap, foil, tissues, crepe, mailing tubes, paper dishes, and boxes. As the child grows in his ability to solve art problems and make judgments about good three dimensional design, introduce cellophane, metallics, display boards, fine water color paper, and Japanese hand made papers.

Tools are few and simple. Begin with GOOD scissors, glue or paste, tape (transparent or masking in both single and double face), stapler, paper clips, pins, and fasteners. Later add different types of knives, paper punches, ruler, needle and thread, and simple precision tools. As the child uses more difficult paper, introduce wire for holding, pinking shears, X-Acto knives, razor blades, and more complicated precision tools. A cardboard mat for cutting and a smooth surface for folding are necessary.

EXPERIENCES IN THE USE OF THREE DIMENSION PAPER INVOLVE THE MASTERY OF BASIC TECHNIQUES IN:

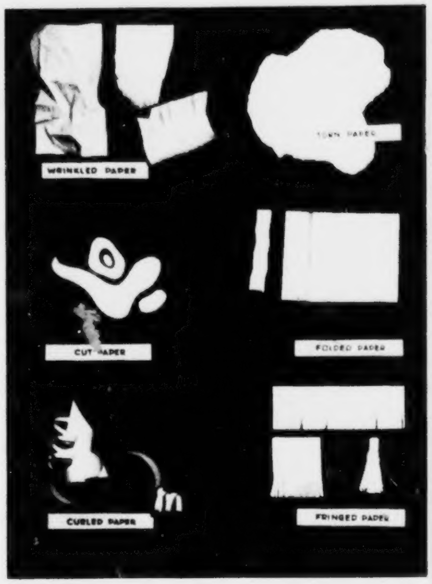
TEARING. For mind-eye-finger coordination, for discovering characteristics of the paper and for exploring its limitations and possibilities, tearing is good.

CUTTING. Cutting should be done in a clean, continuous, free flowing sweep by holding the paper firmly in one hand and feeding it into the jaws of the closing scissors held in the other hand.

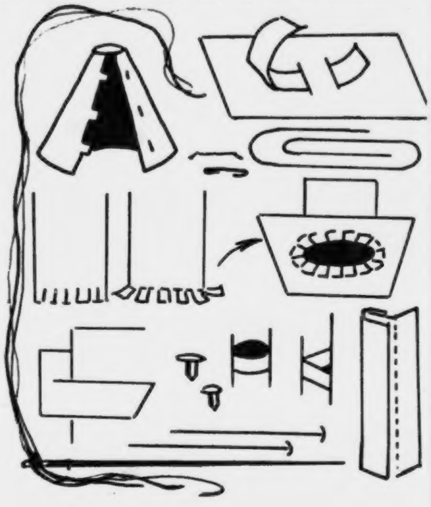
AVOID CHOPPING. As the child develops skill, knives can be used for slashes and cutting along steel rulers.

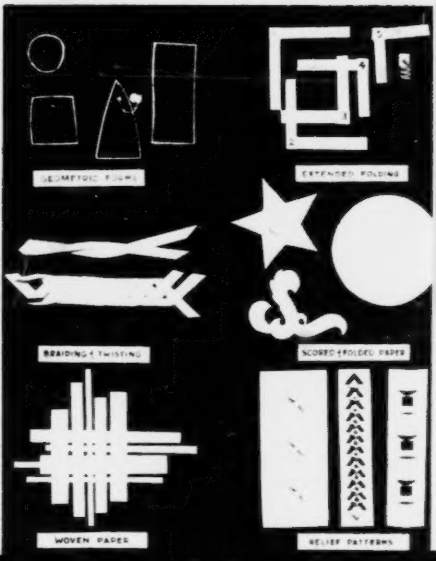
FOLDING AND SCORING. Folding must be done accurately for a crisp, tailored effect. In diagrams, dotted lines are folding lines. Folds in reverse alternation are accordion folds or mountain (up) and valley (down) folds. Such folds lend interesting light and shadow patterns. Scoring is necessary when folding on a curve or when folding heavy materials. It is a process of pressing a fine, deep, line into the paper so it will bend more easily. It can be made with the back edge of a scissor blade, a table knife, a knitting needle, or the tip of a modeling tool. Be careful so you do not cut the paper.

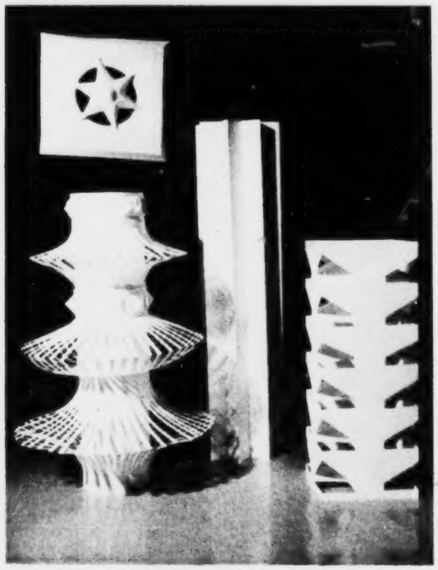
BASIC TECHNIQUES . . .



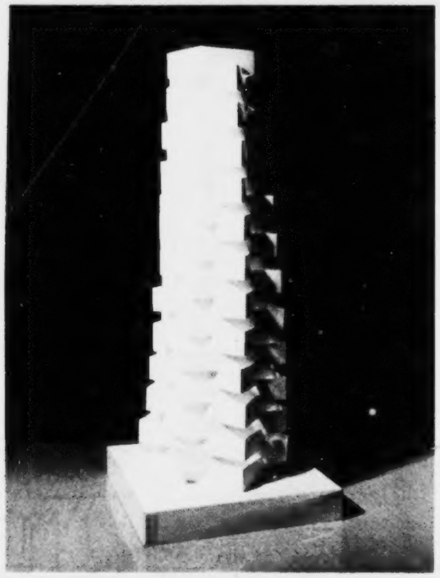
WAYS TO FASTEN PAPER



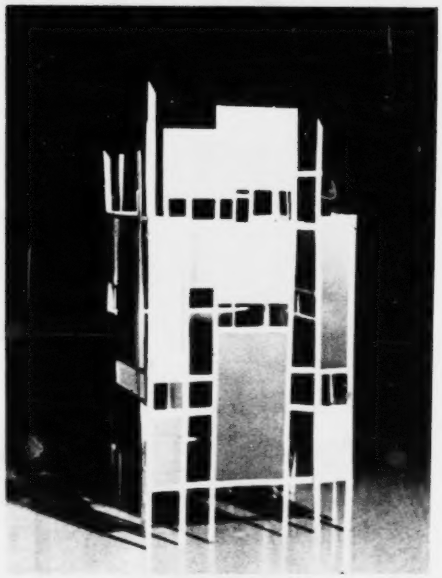




CUTTING & FOLDING IN AND OUT



INTERLOCKED CARDBOARD STRIPS



FOLDED PAPER STRIPS WITH
COLORED TISSUE PAPER PANELS

Paper Sculpture....

THREE DIMENSIONAL PAPER CONSTRUCTIONS. Nonobjective paper sculpture is an exciting challenge to the more proficient student as he explores paper in depth while making an aesthetic visual statement.

EXPLORE RELIEF DESIGNS. Use white construction paper or water color paper. White paper admits more subtle degrees of light and shade than colored paper. Different shapes can be cut in the paper and left in low relief or raised at right angles to the background to form shadow patterns. Cutting in and folding in and out without adding to or subtracting from challenges problem solving in spatial relationships. Inserting strips of paper, weaving, twisting and other irregularities should be tried.

ADVANCE TO FREE SCULPTURE. Use squares, cylinders or other forms. Cut, fold in and out, and crease into a new form. Lanterns for decoration can be made from a cylinder in which the walls have been pierced. Cut in open areas to create transparencies. Explore their tensions and compressions. Stage scenery, table favors, advertising displays and background designs are some problems offering challenging opportunities for expression.

BUILD WITH STRIPS OF CARDBOARD. This will increase a student's awareness of shape and spatial relationship and provide a good motivation for a unit on architecture. Use strips of heavy cardboard cut across half way and joined by an interlocking process. No paste or glue is necessary. Start with strips of similar width and gradually introduce a variety of widths. A more challenging problem is offered when the strips are folded at right angles.

BUILD WITH FOLDED PAPER STRIPS. This process will be a challenge to the more skilled craftsman. Strips of paper are folded lengthwise and used for building A high rise apartment house, overhanging stories, stilt constructions and cantilevered forms all suggest ways the strips could be used as structural elements. By such exploration, the student will become more aware of his visual environment. Toys, buildings, and machinery will challenge the more inventive student as he becomes a more proficient craftsman. These constructions are extremely fascinating to the young sculptor and have unique display value. The AESTHETIC QUALITY should never be sacrificed for mere uniqueness.

Paper Sculpture...

Scored lines must be parallel or radiate from one point. If they cross, a tiny cut at the point of intersection will relieve the tension.

CURLING. Hold the paper tightly and draw it over the blade of a knife or open scissors. The thickness of the paper and the amount of pressure used will determine the amount of curl. Rolling a strip over a pencil or over the edge of the table will produce a similar effect as the fibers in the paper are stretched. If many curls are needed, cut a fringe from folded paper and separate into individual curls.

PRESSING PAPER INTO PLACE. Cut out basic shapes carefully and score. With great patience coax, press, bend, and twist into the form desired. NEVER FORCE. Accuracy in measuring is important if forms are to fit well. Allow extra width for the third dimension.

FASTENING. Fastening pieces together calls for good craftsmanship. The beginner can use paste and staples. Tape looks like a bandage if it is not applied decoratively. The more advanced sculptor will use it invisibly or he will use paper by itself. Tabs, lacing, weaving, and folding will secure paper to itself. Little PADS in the form of triangles, squares or circles to hold or cushion layers of paper are effective. Wire and needle and thread make strong, invisible holds.

EXPERIENCES IN THE USE OF THREE DIMENSION PAPER INVOLVE EXPERIMENTS IN FORMING:

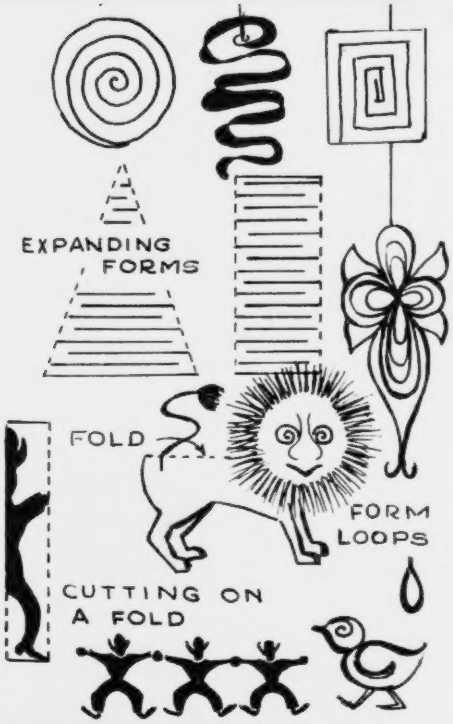
CYLINDERS. Roll a sheet of paper, fasten at the top and bottom for a basic form or support for many forms.

CONES. A cone varies from almost flat to extremely steep. All cones are made from a pie-shape wedge of a circle. A beginner could draw around a shape until he can use a compass. The width of the wedge determines the flare of the cone. The butted or overlapped edges are the radii of the circle and must be cut carefully to fit.

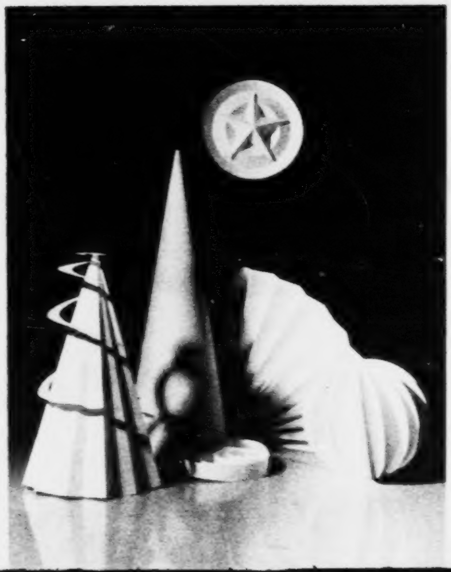
GEOMETRIC FORMS. A square, a circle, a triangle, a semi-circle or a tear drop can be made by looping and folding and pasting a strip of paper.

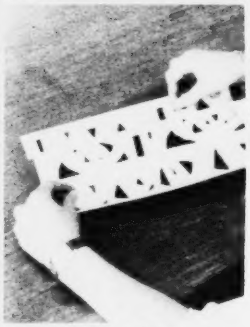
ABSTRACTIONS. Modifications of basic shapes in overlapped and connected relationships made interesting new forms if GOOD DESIGN is emphasized.

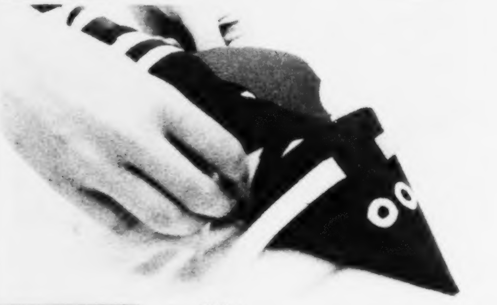
EXTENDED FORMS. Make a cut from the outer edge of a square, a circle, or a triangle to the center. Pull it apart and suspend like a mobile. A shape can be folded any number of times and alternate slashes from one side almost to the other, unfolded, stretched and hung as a mobile will make attractive decoration.



SCULPTURED FORMS







Making Things with Paper...

The pictorial illustrations show the many possibilities of working with paper. Actual classroom results.

The top illustration at left is complicated and should be reserved for the advanced student. Requires patience.

The two pictures below show the cut and fold type of paper work which is quite successful at primary and intermediate grade levels. Good for developing spatial ability.

Simple paper animals can be made by the average grade school pupil. They need only to have experienced some of the basic paper work, and a keen imagination.

The next two illustrations show some floral paper work.

Use of corrugated paper for constructions and inventions by children will produce many satisfactory results.

The bottom two pictures remaining show some of the animal type structures children enjoy making, using the papier mache technique. We felt that actual pictures would help show some of the results we can expect from children.

When venturing into three dimensional paper work make adequate space provision for storage until their projects can be completed. All children can feel some degree of success when working with paper. Very little expense is needed. Much of the material can be gathered from discards found in the home.

NEVER UNDERESTIMATE THE ABILITIES OF CHILDREN.

PAGE 54 3D RIGHT POCKET

PAPIER-MACHE

Mosaics For Children . . .

Young children need the cutting and pasting technique that mosaic work provides. We can call it puzzle making. To the child this becomes a game of cut and join them again. The illustrations at right show two shape pull aparts. To help the young child avoid confusion, let them cut and immediately paste a piece at a time.

Simple shapes, forms, objects are used at the primary grade level. They can proceed to the next step in the mosaic work as illustrated to the right. Children put small torn bits into a drawing they have made of different colors disregarding any space between the paper bits. Overlapping is also disregarded. Keep it simple.

The second illustration of the fish is more difficult. The student keeps in mind spaces between the pieces. Note the varying sizes of the pieces, this avoids monotony. Try to keep the spaces between pieces uniform.

Once the technique is learned children can work alone and can be easily stimulated to work on these at will. Explorations with other materials besides paper could be suggested. Can lead to group mural activity.

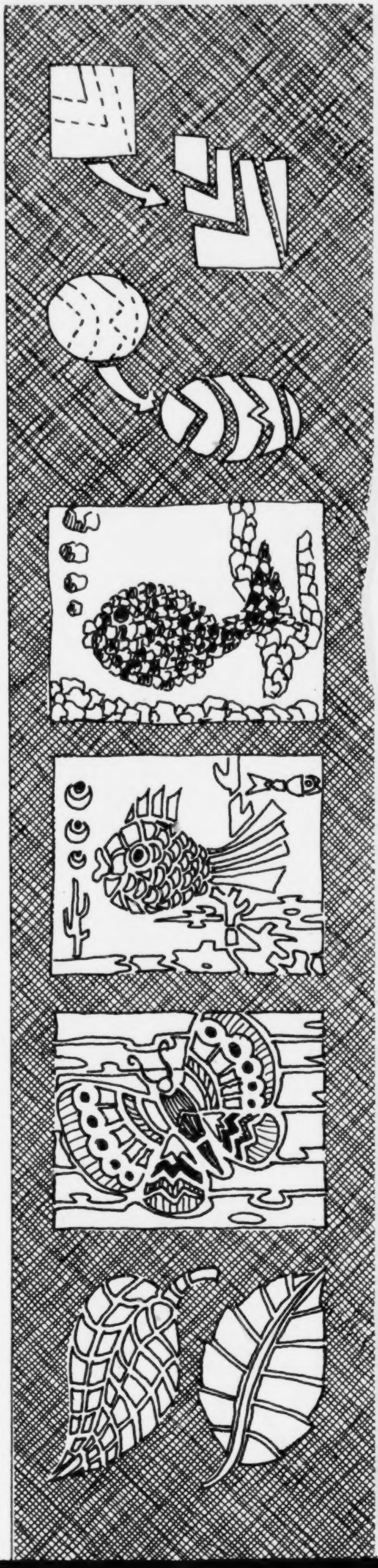
The following can serve as subject matter for mosaics:

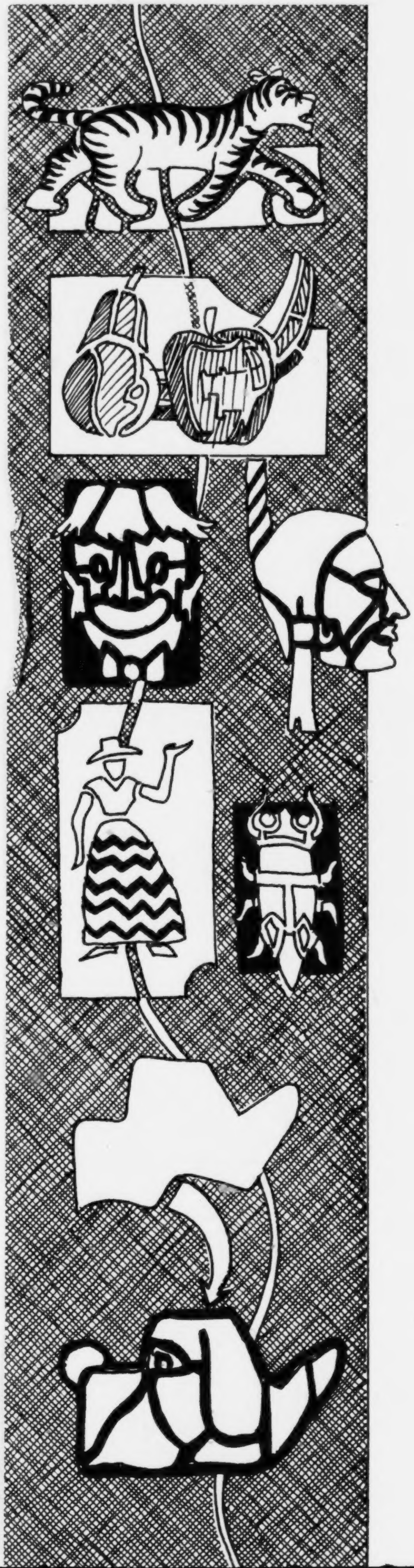
Leaves, many shapes
Fish, real & imaginary
Fruits and vegetables
Cars, trucks, & train
trees
faces
birds
moths
designs
animals
objects
insects
butterfly
abstracts
people
church

SUGGESTIONS:

- Paste pieces on dark background paper which creates a leaded stained glass window effect quite unusual.
- Draw an object, cut out the shape and proceed to cut it apart. Repaste on another sheet, leave tiny uniform spaces.
- Train children to keep on hand an old envelope, this holds their unused pieces. Quick cleanup — less loss.
- Make many color washes for learning technique . . . then cut them into usable pieces for later mosaic ideas.
- Magazines provide color advertisements which make a good value study as well as pieces for mosaic ideas.
- Collect many examples of the many kinds of mosaics used today such as the beautiful decorative murals on the many public buildings found in Mexico City.
- Use up your old scraps of colored paper with paper punch.

  Children like to punch out the colors. Store them in separate envelopes for future mosaic work.





Mosaics . . .

The illustrations at left show some of the applications of mosaics previously described. Many more are possible and brief descriptions will give the pupils several ideas in their experimentation with mosaics.

Have the children save seeds of many varieties. You can purchase different kinds at any seed store. The pupils can also save watermelon, sunflower, melon seeds; peas, corn and rice. These can be placed into small nut cups for use. The rice can be tinted by letting it soak in color.

Egg shells crushed make interesting mosaics . . . pre-dye them for color variety. They do not require careful placement and can be scattered over the small glued areas as they are needed. Good for elementary pupil.

Many of the mosaic projects, because of requirements of time, make good seat work. The students can't wait to get at their work when other subjects are done.

Ribbons are often thrown out at ribbon counters. They make excellent mosaic material. All ages enjoy this activity. Start collecting soap, gum, candy wrappers, colored cellophane and other material for mosaics.

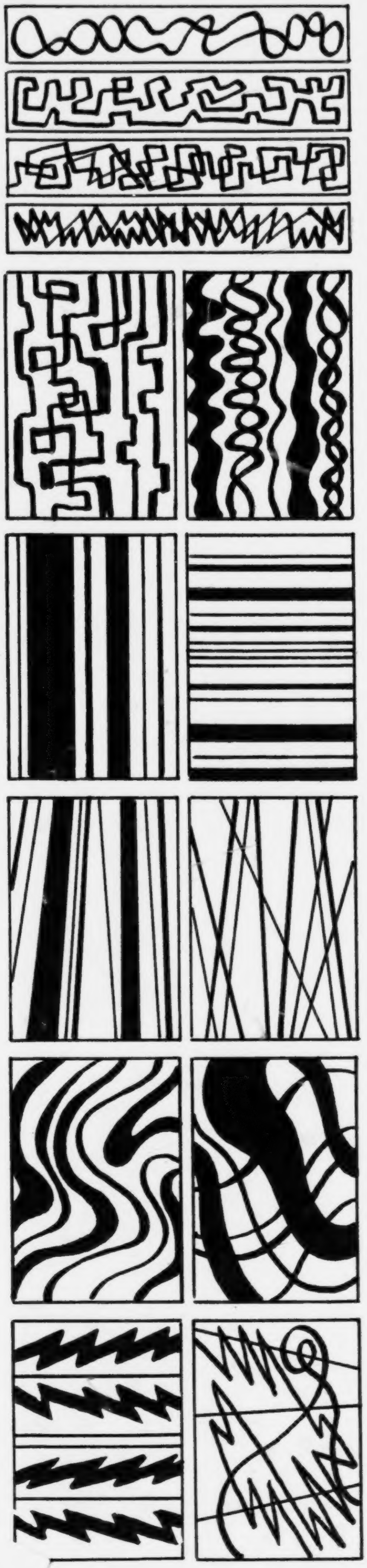
New material will work only if you recognize its potential. Yarn can be used as space dividers.

Ceramic and linoleum tile will provide hours of enjoyment in abstract designs. A class can work cooperatively in collecting old dishes, bottles, tiles, corks, wood, and other discarded material. They work together to produce large mosaics which are framed.

Care must be taken when cutting glass . . . protect eyes and hands. Caution the children not to touch broken glass. Have band aids ready. In most instances keep the choice of material such that children need not be concerned with cutting themselves.

Older children like to explore all possibilities of mosaics . . . stones, pebbles, corn, beans, etc. This is a disciplining type of activity requiring patience.

The mosaics are unlimited for all ages and results are only limited to the imaginative uses put to the various materials one gathers. This is one area where the cost factor can be cut to a bare minimum. You will find that liquid glue is a must. Mosaics can be fun.



Design Line...

Line describes ideas, emotions, objects, and situations by three properties that produce quality, character, and variety.

- Experiment with linear rhythms exploring the properties of line.

- **DIRECTION**
  - Show speed of movement with vertical, horizontal, and diagonal lines.
  - Use curved lines for flowing rhythms.
  - Use jagged lines for angular rhythms.
  - Use twisting lines for erratic rhythms.
  - Cross lines to create points of conflict.
  - Combine movements for interest.
  - Combine movements to describe form.

- **COLOR**
  - Allow line to advance or recede in space by varying light and dark value.
  - By pressure on drawing instrument.
  - By retracing to darken.
  - By moving within a single line.
  - By use of medium characteristics.

- **WEIGHT**
  - Use thin lines for delicate, graceful, and fast moving rhythms.
  - Use thick lines for heavy, sturdy, and slow moving rhythms.
  - Vary thick and thin quality within single line movements.
  - Vary thick and thin quality by character of drawing medium.

Design Line . . .

Line describes space by continually changing directions until it comes back to the starting point or crosses itself in its return movements.

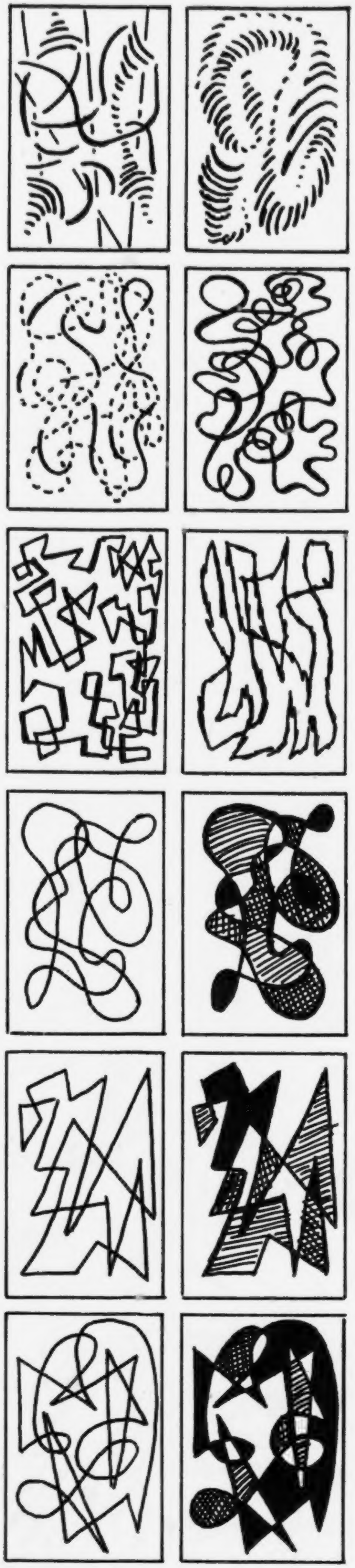
- Character of design is created by the type and quality of line.
- Variety of space is determined by the number of changes in direction, the times the line crosses itself, and by the closeness of line to line.

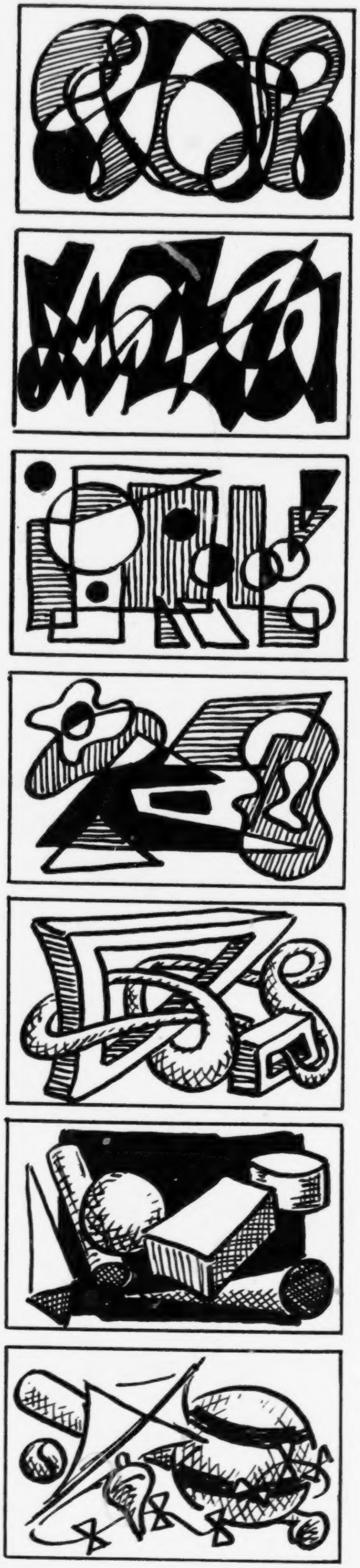
EXPERIMENT WITH LINEAR DESCRIPTION OF SPACE.

- Describe space with thick and thin line moving in flowing rhythms.
  - with thick and thin line moving in angular and jagged rhythm.
  - with textured line.
  - with broken line.
  - with a combination of straight and curving lines.
- Consider linear movements as contour description of solid form and empty space.
- Identify solid form by shading with color and texture.

USE LINEAR EXPERIMENTS IN APPLIED DESIGN ACTIVITIES.

- Two Dimensional Design
  - Collage
  - Stitchery
  - Weaving
  - Printing
  - Calligraphy
  - Lettering
  - Textile decoration
  - Ceramic decoration
- Three Dimensional Design
  - Mobiles
  - Stabiles
  - Wire Sculpture
  - Assemblages





Design Form...

Form is a solid object having dimension in space. Form has weight, mass, and contour.

A 2D form has one plane moving in height and width. It is flat.

2D forms are typical of painting, drawing, and decorative design.

A 3D form has more than one plane moving in depth as well as height and width. It is thick.

3D forms are typical of ceramics, sculpturing, and structural design.

On a two dimensional surface the illusion of form having thickness in depth is achieved by shading structural planes as effected by light and shadow.

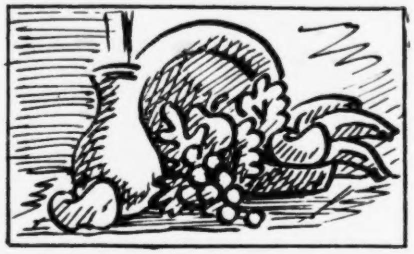
A SHAPE is a two dimensional form described by line or by contour edge.

SHAPE also refers to the contour of a three dimensional form.

All forms are variations of the basic geometric shapes and solids — the square, circle, triangle, cube, sphere, and pyramid.

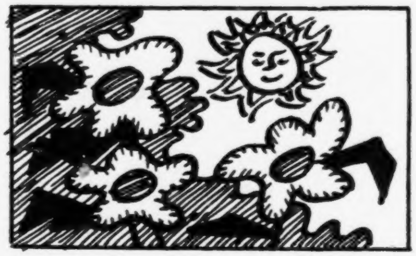
EXPERIMENT WITH 2D AND 3D FORMS IN DESIGN.

- Scribble design — view shapes as solid form and empty space — shade in color and texture.
- Create the illusion of depth by shading solids in three dimension.
- Use geometric shapes for design.
- Allow form to surround and penetrate other forms and to advance and recede in space.
- Use realistic forms geometric in shape.
- Reduce nature forms to basic geometric shapes.



Design Form...

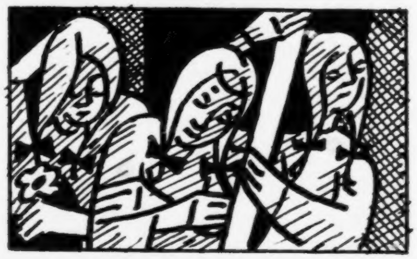
- Draw and paint natural and man made objects in a still life, birds, animals, landscape . . . as a study or pictorial composition.
- Apply designed realism and free form to —
  - Collage
  - Mosaics
  - Textiles
  - Stitchery
  - Printing
  - Copper Enameling



- Apply designed realism and free form to —

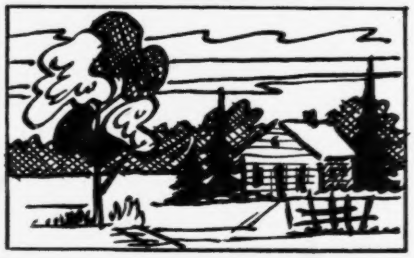
  Relief structures

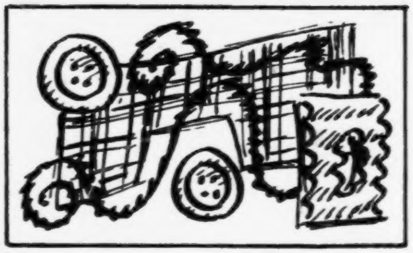
  - Cardboard - paint or coat with plaster
  - Wood assemblage
  - Carved plaster plaques
  - Carved wood plaques
  - Plastic assemblage

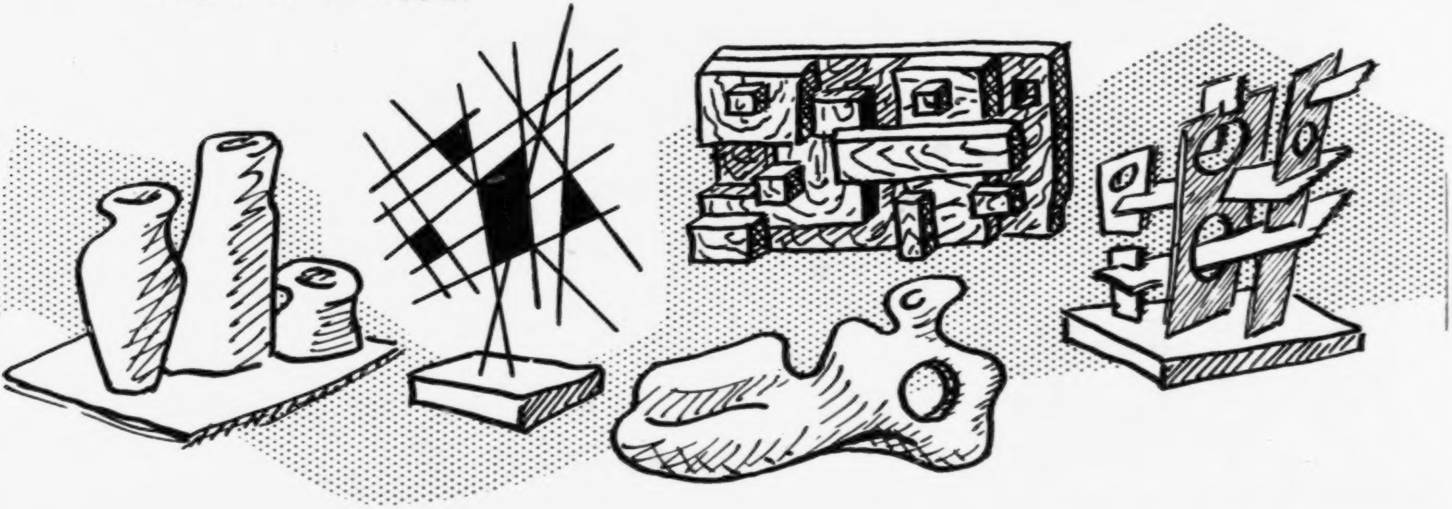


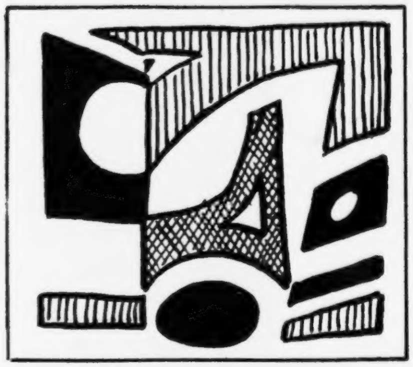
  Structures in the round

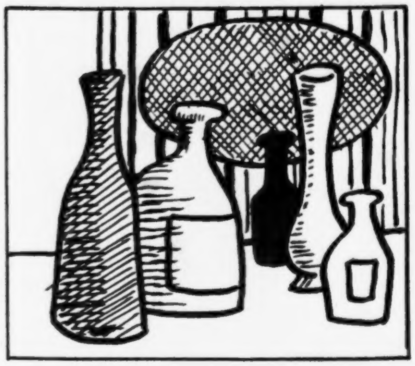
  - Paper sculpture
  - Papier mache
  - Stabiles and mobiles
  - Ceramics
  - Sculpture
    - Wood
    - Stone
    - Clay
    - Synthetic stone

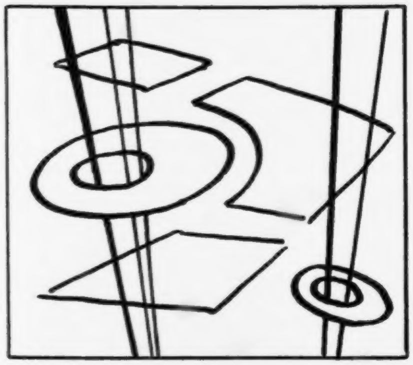


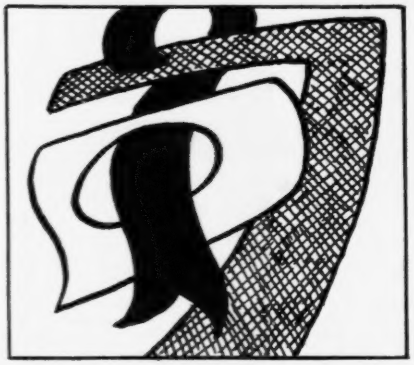


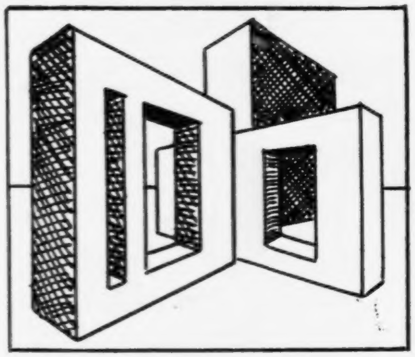












Design Space...

In three dimensional art, space is the actual air mass that exists in and around the volume of form.

In two dimensional art, space is an illusion of air mass, depth, or distance. The illusion is achieved by the intervals between forms, by overlapping lines and forms, by receding and advancing color, and by mechanical lines of perspective.

The relationship of line, form, and color depends upon the amount and variety of space in which they exist.

Space is sometimes considered *negative form* with a size, shape, and character of its own.

Space and the break-up of space are the first problems in every work of art. The size and proportion of a two dimensional surface and the amount and shape of a three dimensional air mass determine the type of line and form to use for spatial design.

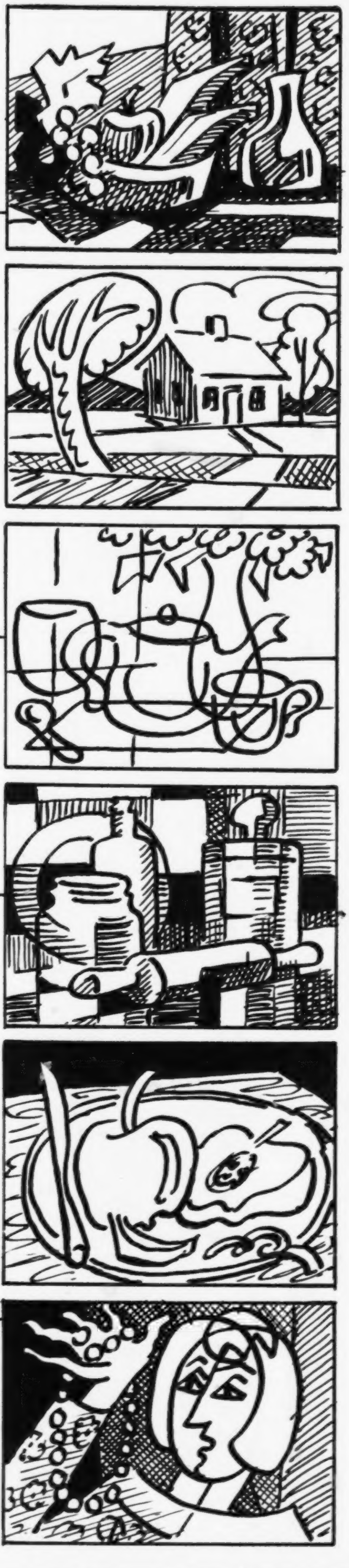
- **EXPERIMENT WITH LINE AND FORM IN SPACE DESIGN.**
  - Vary size and proportion of two dimensional surface.
    - Square
    - Rectangle
    - Circle
    - Triangle
  - Vary direction of two dimensional surface.
    - Vertical
    - Horizontal
  - Vary size of space intervals between lines and free forms.
  - Vary size of space intervals between lines and shapes of real objects.
  - Overlap forms and shade to give feeling of depth.
  - Use highlight and shadow to describe forms with thickness and depth.
  - Describe form and space with advancing and receding color.
  - Use mechanical perspective.

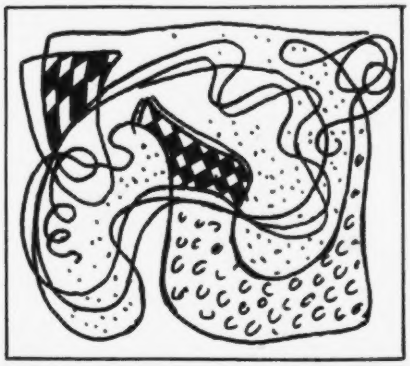
Design Space...

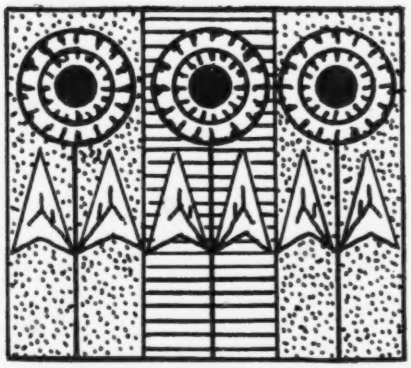
- Draw and paint real objects in a still life composition.
- Draw and paint real objects in a landscape composition.
- Abstract postive form and negative space into flat patterns existing in shallow depth.
- Abstract positive form and negative space into lines and planes of overlapping transparencies.
- Abstract positive form and negative space into lines and planes that extend beyond their limits and divide other forms and spaces into inter-related planes.

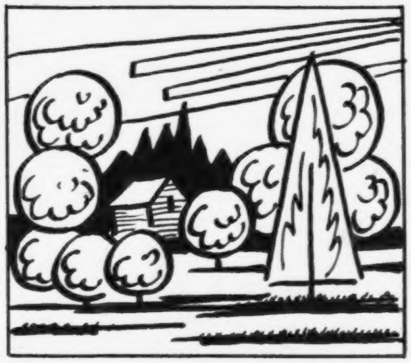
- Observe pictorial material from various points of view.
    - Eye level
    - Aerial — looking down
    - Aerial — looking up

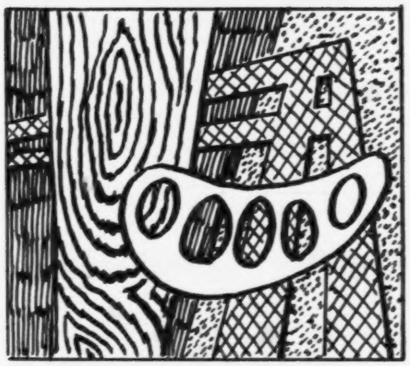
- Experiment with structural designs in actual space.
    - Stabiles and mobiles
    - Sculpture
    - Ceramics
    - Assemblages
    - Stage sets
    - Architectural models

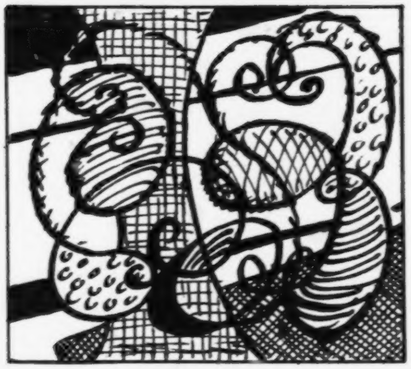












Design Texture...

Texture is the surface quality of a plane or planes inherent in the structural material.

Texture gives a tactile as well as a visual impression.

Texture adds interest and variety to structural form, enriches color, and aids in description and recognition.

- In two dimensional art, symbolic line is used to imitate the textural quality of natural materials or to create imaginary surface patterns.

- In three dimensional construction, the actual texture of natural materials is incorporated into the design, or the surface of the materials may be modified by artificial means to add to or enrich the natural texture.

EXPERIMENT WITH TEXTURE IN APPLIED DESIGN.

- Use line and shading to depict imaginary textures in free form designs.

- Use line and shading to depict real textures in free form designs.

- Describe realistic objects by imitating natural textures.

- Draw and paint natural and man made objects. Observe variety and contrast of texture in still life composition.

- Draw and paint natural and man made objects. Observe variety and contrast of texture in:

  - Landscape composition

  - Animal studies

  - Floral designs

  - Figure studies

Design Texture ...

EXPERIMENT WITH COLLAGE.

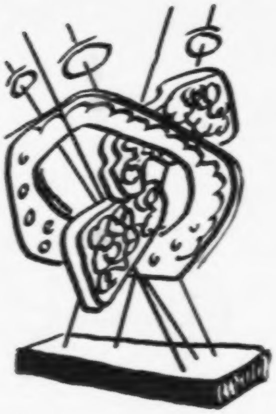
- Paper collage - fold and cut textural patterns.
- Paper collage - use printed textures from magazine illustrations.
- Scrap material collage - use natural textures for variety and contrast.

USE TEXTURE TO ENRICH DECORATIVE DESIGN.

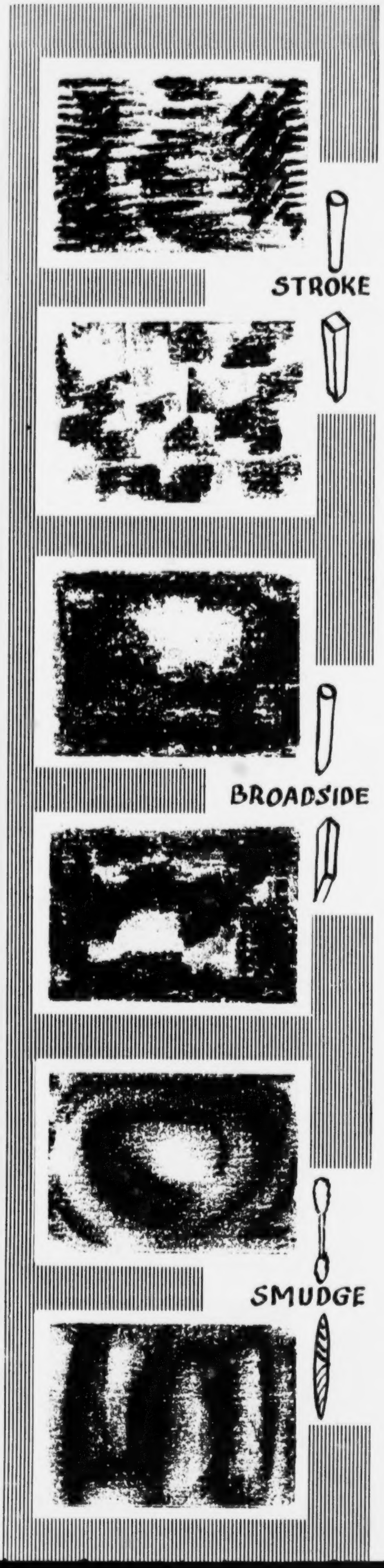
- Wrapping paper
- Wall paper
- Commercial art
- Leather craft
- Jewelry
- Textiles
- Stitchery
- Printing
- Posters and lettering
- Metalry

USE TEXTURE TO ENRICH STRUCTURAL DESIGN.

- Ceramics
- Sculpturing
- Stabiles
- Industrial design
- Mosaics
- Puppetry
- Assemblages
- Mobiles
- Architectural design
- Stage set design



Drawing Chalk...



Chalk and pastel are crayons of pure pigment combined with enough filler and binder to mold into a stick form. The binder does not serve to hold the pigment to the drawing surface. The pigment will smear or brush off unless sprayed with a fixture.

- Apply chalk in strokes of various lengths.
- Vary width of stroke by alternating point or edge of crayon and broadside of crayon.
- Mix colors by working one color over another. The colors will blend together according to the amount of pressure applied — or more blending can be achieved by smudging with fingers, paper stump, or cotton swab.
- Variety of hue and value may be obtained by mixing light and dark colors, warm and cool colors, or complementary colors.
- Greater variety may be achieved by mixing the colors with white for highlights and black for shadows.
- Distinct edges and sharp lines are difficult to retain while the drawing is in process. Crisp accents of highlights and shadow or line and texture may be applied as a final step.
- Do not overwork, results in a smeared look and gives an unsatisfactory experience.
- Place some chalk on paper edge, can be straight or curved. The color can be rubbed off as stencil and repeated. Gives an air brush effect.

Drawing Chalk...

CHALK VARIATIONS

Chalk and Wet Paper

- Dampen paper with water, milk, or liquid starch.
- Draw directly into the wet surface.
- The colors will bleed out and mix in accidental blends.
- Milk and starch act as a fixative.

Chalk and Milk

- Dip chalk crayon into milk — use powdered skimmed milk or buttermilk for economy and convenience.
- Allow chalk to soften slightly in liquid.
- Apply boldly to paper — softened chalk piles up in an impasto of color.
- Mix and blend by applying strokes or layers one over and into another.

Chalk and Watercolor

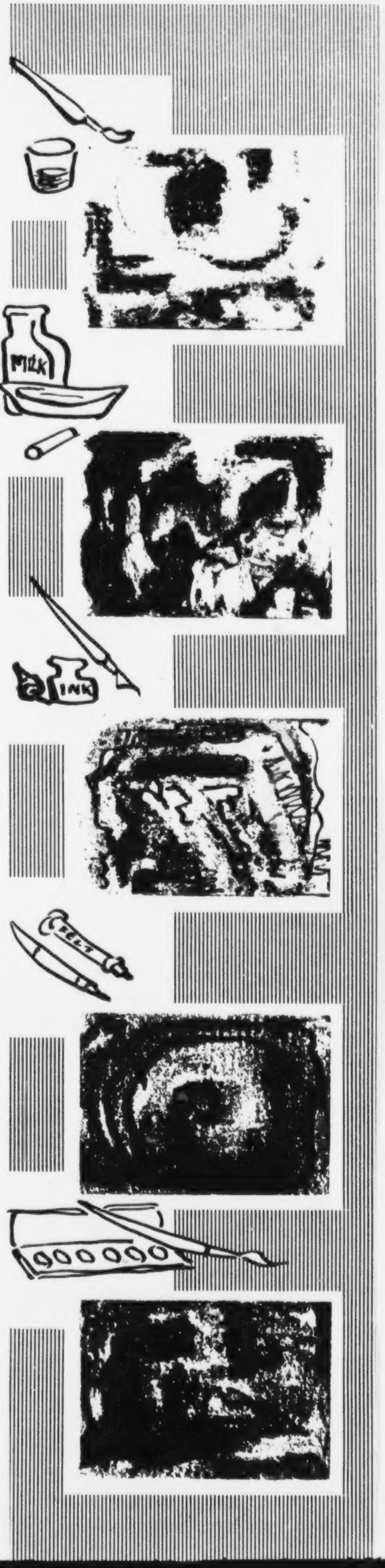
- Outline and shade — do not cover all areas.
- Spray with fixative.
- Complete sketch with transparent watercolor.
- Allow watercolor to cover some areas not colored by chalk and to mix and blend with the chalk in other areas.
    - The chalk gives brilliancy and depth of color to the watercolor washes.
- Alternate layers of each medium if desired.
- Apply washes over unfixed chalk if more spontaneous color mixtures are desired.

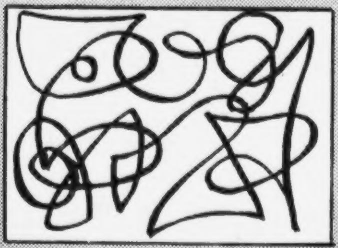
Chalk and Ink

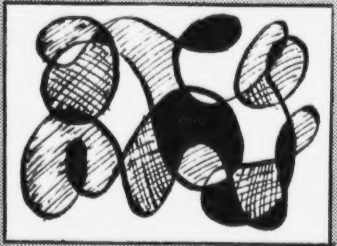
- Shade India ink and felt tip pen drawings with colored chalk.
- Add linear descriptions to a chalk drawing with pen and ink, brush and ink, or felt tip pen.

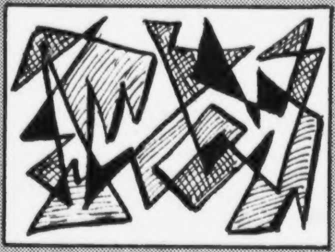
Mixed Media

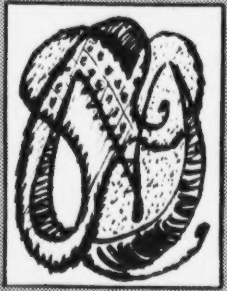
- Combine colored chalk with tempera or acrylics for variety of texture and color.
- Spray with fixative.
- Alternate layers of various media.
- Add linear accents with ink.

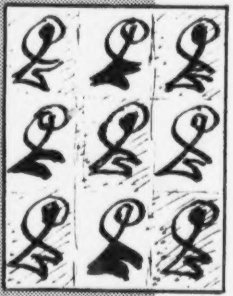


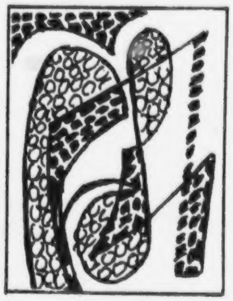


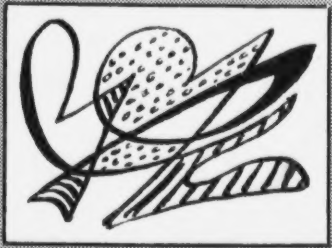


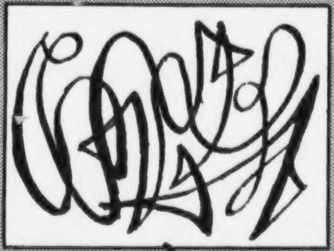












Scribble Drawing...

Experiments in scribble design promote expressive use of line, creative break-up of space, and imaginative recognition and selectivity of form and space.

DECORATIVE DESIGN

- Without preconceived ideas, move drawing instrument at random over surface of the picture plane.
- Scribble to the edges and into the corners of the picture plane.
- Alternate directions and allow lines to cross and recross enclosing space and describing shapes.
- Allow the spaces and shapes to vary in size.

VARY COLOR AND WEIGHT OF LINE:

- Proceed from light to dark
- Thick to thin even flowing
- Thick to thin jagged and textured.

FOR VARIETY, CHARACTER, AND MOOD USE:

- Curving lines only — create round flow form.
- Straight lines only — for squared jagged form.
- A combination of both.

AFTER INITIAL SPACE BREAK-UP:

- Select interesting shapes and continue development of scribble lines.
- Consider some as filled space and some as empty space.
- Shade filled space with color, value, and texture.

MATERIALS:

Pencils, Charcoal sticks, Chalk, Crayon, and Ink.

ADDITIONAL ACTIVITIES:

- Repeat designs for making textiles, wallpaper and gift wrapping — also wrapping for all occasions.
- Unit design for mosaics, collage, plaster, metal, or wood plaques or reliefs; stitchery, & weaving, book covers, metal or leather tooling.
- Free form or non-objective drawings and painting.

Scribble Drawing...

Scribble lines break-up of space sometimes describes real objects. The objects will appear distorted and caricatured. Discovery and recognition of them help develop imaginative use of form and space for design.

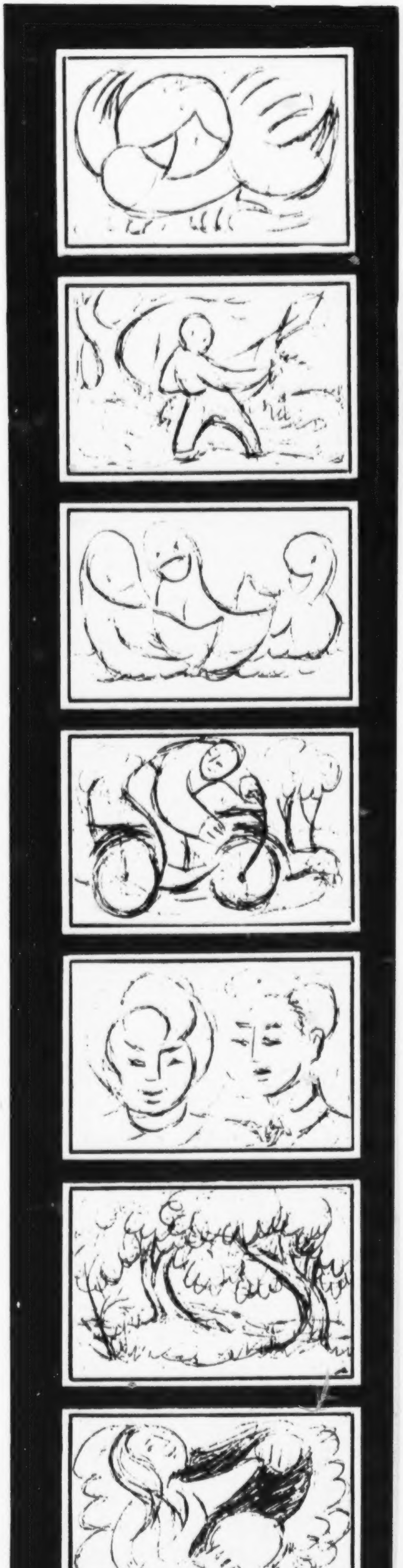
- Break up the picture plane with scribble lines that alternate directions, cross each other to enclose space.
- Retrace the lines adding color and weight, this stresses the most meaningful and unique shapes.
- Study the shapes and relate them to the basic shapes of real objects.
    - Observe first shapes of familiar objects.
    - Experience will develop child's ability to associate abstract shapes to real shapes.
- When one object has been discovered, use it as a key to recognition of other shapes.
    - Ask yourself — What is it doing?
    - What environment might it be in?
    - How can I adapt this to other shapes in the pictorial design?
- Develop the shapes as they are for imaginative and spontaneous representation.
- Improve the distortions for more realistic representations.
- Keep as many of the spontaneous lines and shapes as possible.

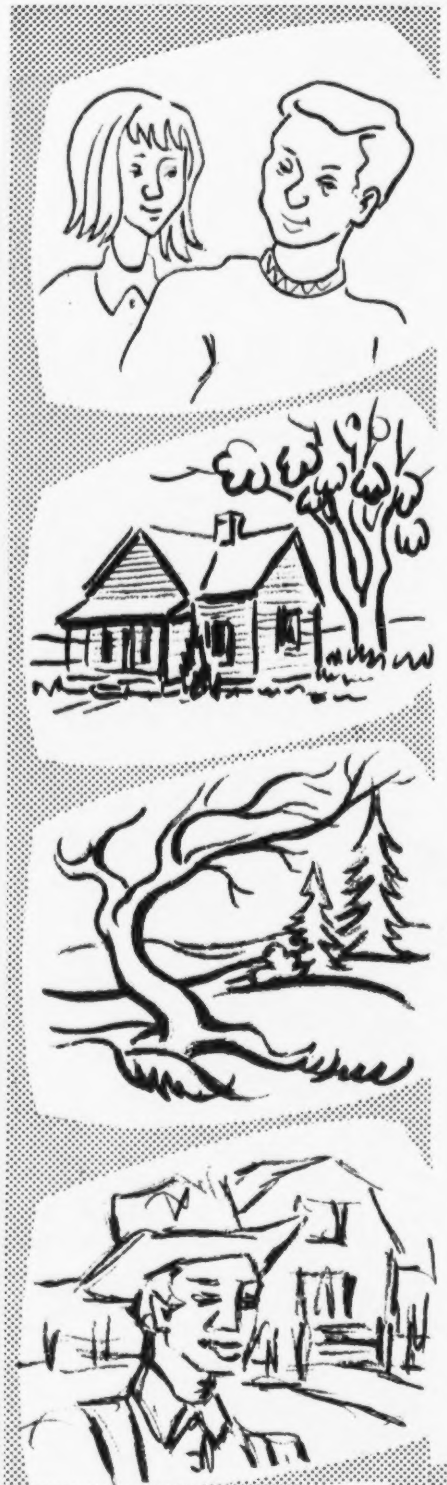
Materials: Pencils, charcoal, chalk, ballpoint pens, crayon, ink, and watercolors.

ADDITIONAL ACTIVITIES:

Use the sketches as ideas for finished drawings and paintings in watercolor, tempera, oil.

Trace the design retaining scribble character. Reduce or enlarge them by redrawing.





Pencil Drawing...

Line quality of pencil drawing depends upon the type and degree of hardness of the pencil lead. The clean even flowing lines are obtained with a medium to hard lead. A line varying in color and weight is obtained with a medium to soft lead.

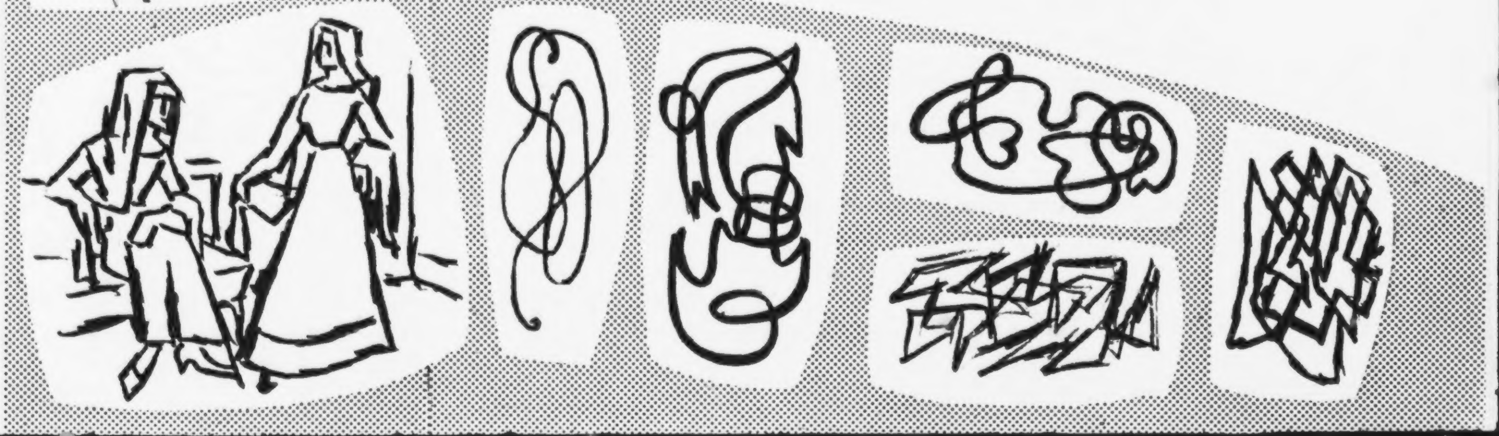
OUTLINE

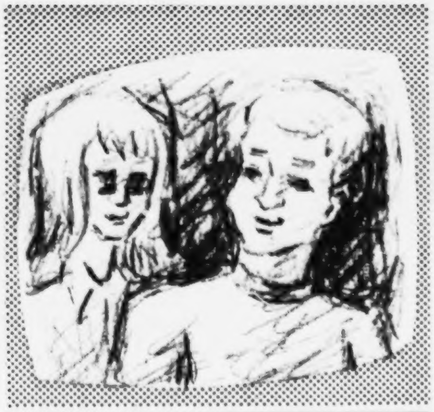
Establish a light scribble guide to size and the placement of form.

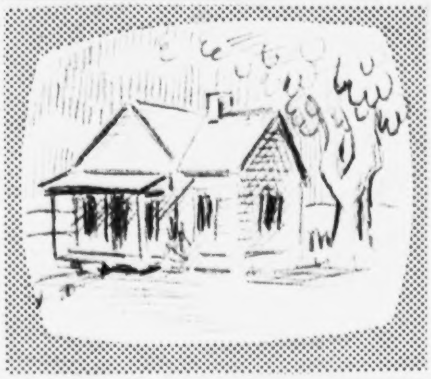
- Line without variation using the same color and weight for all contours and textures.
- Line with variations using light and darker colors and thick and thin weight for accent, contours, and textures.
- Try varying the pressure on drawing tools.
- Retrace lines, smudge with stump or fingers.
- Line with textured line using the modified scribble to retrace portions of the outline. Variety is achieved by the length of stroke used for retracing.
- Experiment with sharp points, square points, and dull points.
- Experiment with various types of pencils.

MATERIALS:

Graphite pencils: 6B-soft; 4B-medium; 2B-hard
Paper, white and manila drawing, bond, bristol.







Pencil Drawing...

SHADING — LINE STROKE

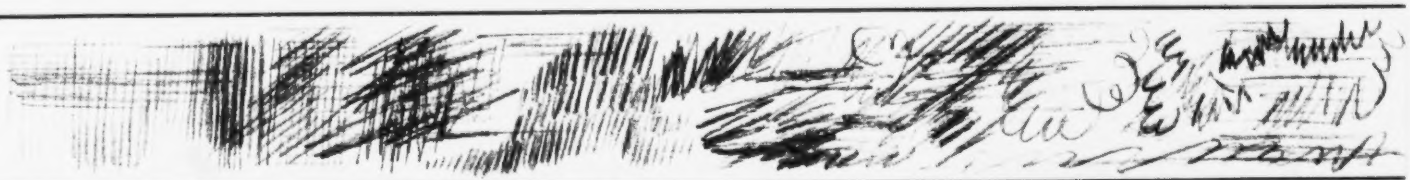
Shade from light to dark with separate parallel strokes using the point of the pencil.

VARY COLOR BY:

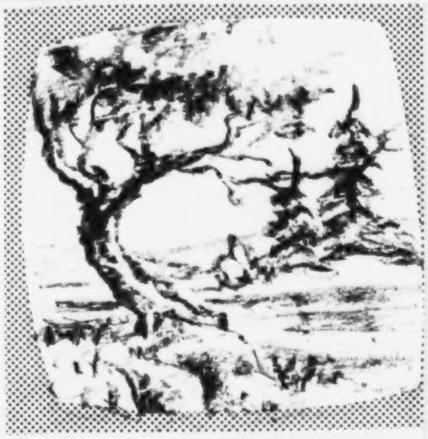
- Pressure on the pencil lead
- Closeness of line strokes
- Overlapping of line strokes
- Crosshatching for effects

VARY QUALITY OF TECHNIQUE BY:

- Controlling your strokes
- Sketchy irregular strokes



- Trying directional stroke
- Sharpness of pencil point — Rounded, pointed, squared tips.



BROADTONE:

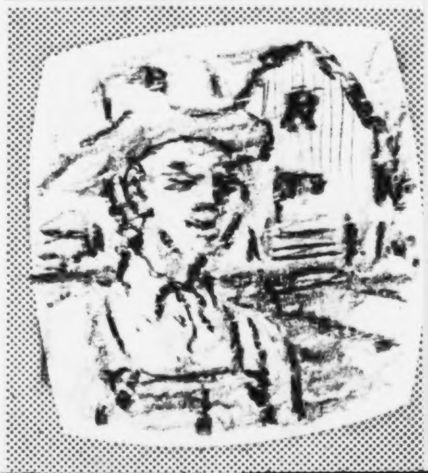
Shade from light to dark using the broad side of the pencil lead for a smooth, even gradation of color values.

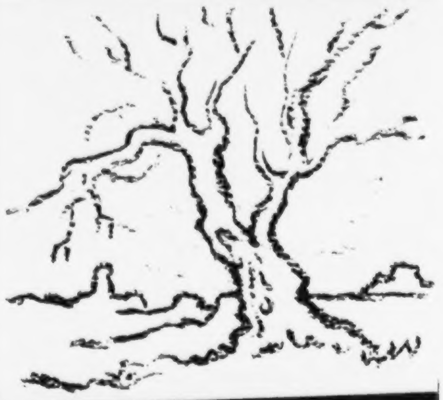
VARY THE COLOR BY:

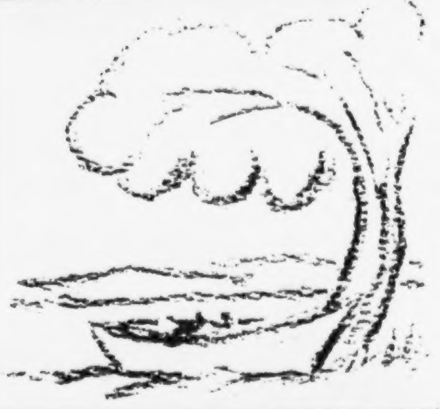
- Pressure on the pencil lead
- Overlapping areas of value.

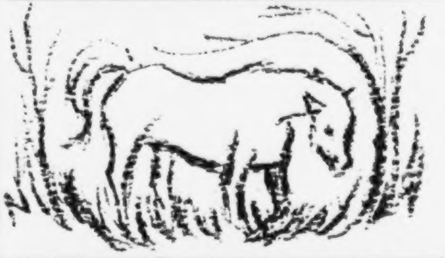
VARY QUALITY OF TECHNIQUE BY:

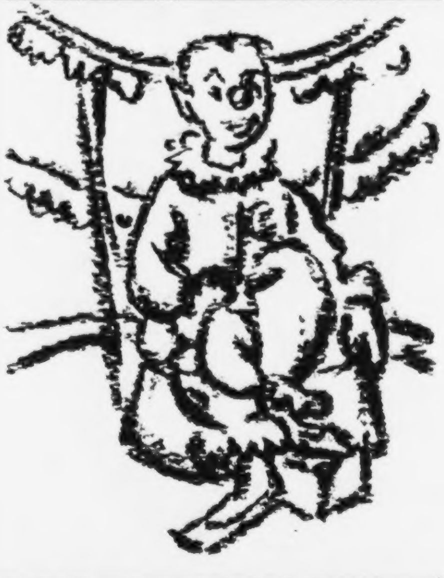
- Color gradations achieved by blending with a pencil lead.
- Color gradations achieved by smudging with fingers, paper stump, cotton, or tissue.











Charcoal Drawing...

Charcoal is a flexible medium especially suited to a free, sketchy drawing technique.

- Natural vine charcoal is the traditional medium. It produces a soft velvety quality of line and shading. Crisp lines and edges are difficult to obtain.

- Processed charcoal is a mixture of charcoal pigment and a binding medium which is molded into crayons or lead for wooden or paper bound type pencils. It is available in various degrees of hardness which permits a more controlled use of the medium. Lines and edges may be blended and soft and sharp and crisp. Color values can range from very light to deep, rich black.

- Charcoal pigment does not adhere well to drawn surfaces. A rough textured paper provides tooth for holding the pigment, but for permanency the drawing should be sprayed with a fixative. The best fixatives are the clear lacquer or plastic sprays. Hair spray works well, and a milk spray makes a good substitute. See the recipe section of the art guide.

LINE DRAWING

- Using the point or the edge of the point of the charcoal stick, pencil, or crayon, outline in a controlled or sketchy manner.
  - Vary color and weight of line by pressure of the stroke.
  - Vary color and weight by retracing lines varying the pressure of the stroke.
  - Vary color and weight by smearing the line with a finger, paper stump, cotton, tissue.

MATERIALS:

Charcoal sticks, pencils, or crayons.
White drawing paper, charcoal drawing, and fixative.

Charcoal Drawing...

SHADING

Use the broad side of the pencil or crayon.

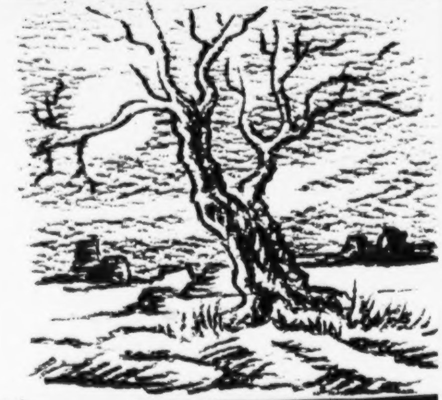
Begin with light values. Add succeeding layers of dark values. Smear and blend in even gradations.

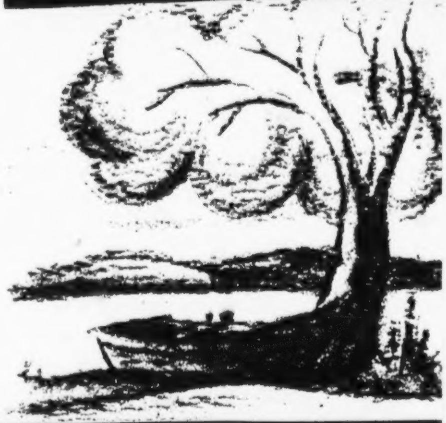
Leave white of the paper for highlights or if you wish pick out light values with a kneaded eraser.

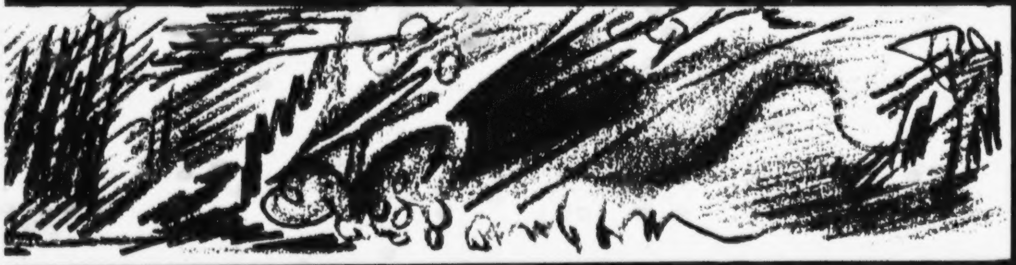
Shade and model for atmospheric quality of space and form with no descriptive outlines. Allow the edges of the form to blend into the background.

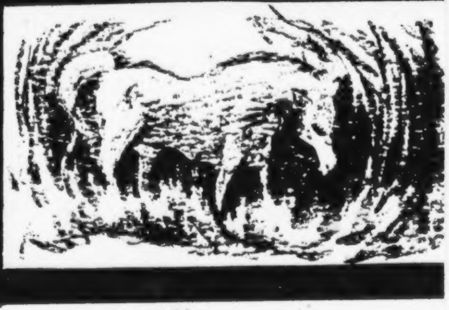
Shade and model adding the linear accents for interest and descriptions.

Make outline drawing. Shade and try blending the value patterns in reference to pre-established contour lines. Accent the linear descriptions as a final touch.









LINE STROKE

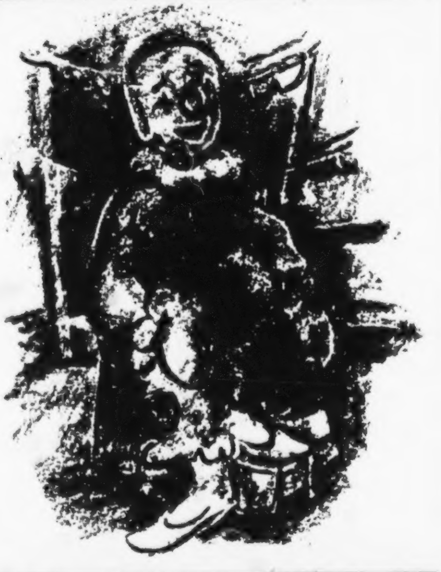
Apply strokes parallel to other strokes varying the closeness of line.

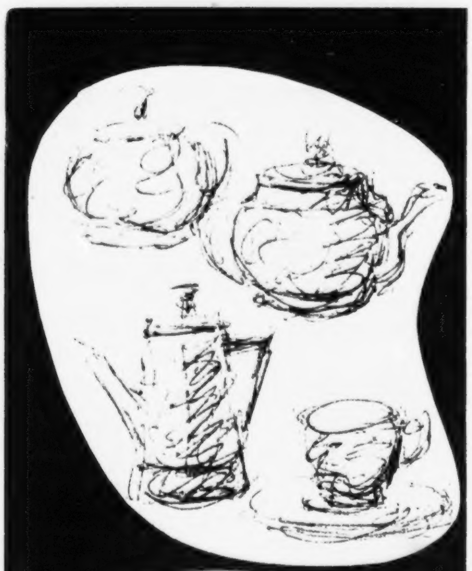
Vary directional movement within strokes. Waved, curved, straight, or zig-zagged give pupils the possibility of variety in shading.

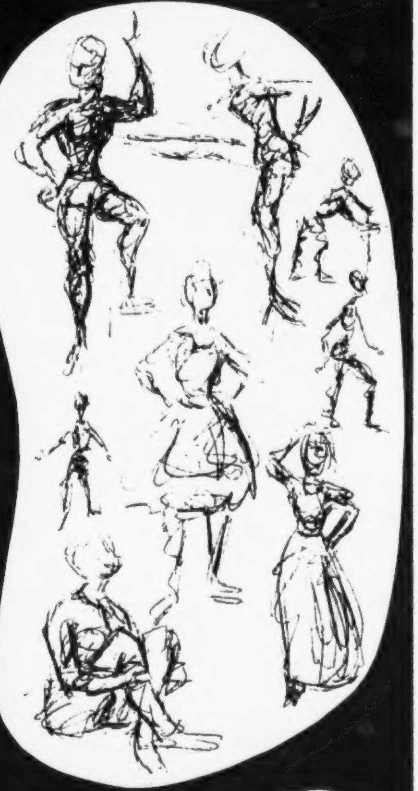
Crosshatch and overlap the strokes.

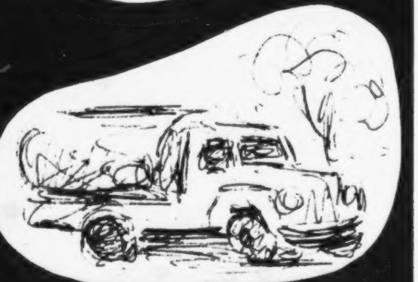
Allow smear of pigment to add to the gradation of color but keep line stroke quality if at all possible.

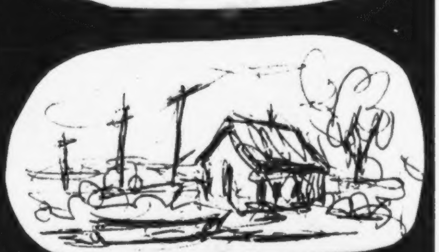
Use texture of line stroke variations which add color and interest.











Gesture Drawing...

The character of an object is inherent in the basic movements of its structural lines and planes. Scribble drawings to make quick observations of the many basic movements. Encourage simplification of the child's statement, expressiveness of representation and the decisive analysis.

ACTION SKETCH

- In one minute or less scribble the basic movement of an animate or inanimate object.
- Observe action of lines and planes from center of object to contour outlines.
- Observe action of lines and planes from contour to the center of the figure.
- With experience add:
  Volume as described by light and shadow.
  Descriptive detail.
- Extend the length of time to 2-5 minutes, depending upon the object and the situation.

EXTENDED GESTURE

- Sustain period of observation and drawing from 5 to 10 minutes.
- Move swiftly from area to area using scribbled line at all times.
- Correct movement of lines and planes.
- Correct proportion of line, plane, and space relationships.
- Do not erase incorrect lines — continue scribble until correct observations become more obvious.
- Express solidity of form by extended scribble in shadow areas.
- Add descriptive detail as needed an as time allows.
- Final accent lines may be used to edge patterns of scribble planes for description.
- Extended gesture may be observed for 30 minutes or longer.

Gesture Drawing...

EXTENDED GESTURE FOR COMPOSITION

A group of objects in space may be observed with quick scribble for the unusual pictorial design.

- Select the objects from pictorial situations.
- Determine the basic shapes of the objects.
- Scribble form and space relationships to the picture plane.

  Begin with trial placement form in space.

  Keep scribble line fluid and changeable, until proportion of form to form and the placement of form in space is pictorially correct.

  Add linear accents as desired effect is achieved.
- Establish an interest in foreground, middleground, and background areas of a pictorial space.
- Determine the patterns of light and shadow.
- Develop sight movements in linear rhythms.
- Discover focal point or center of interest.

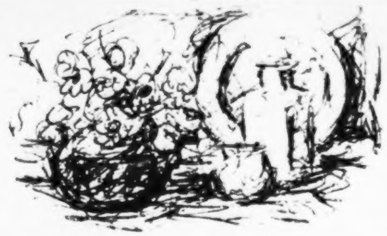
MATERIALS:

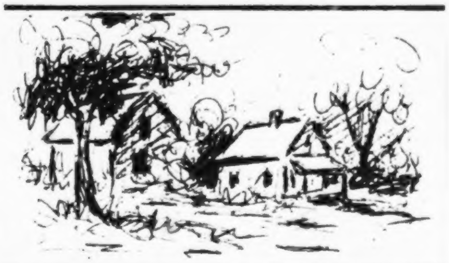
Pencil, ballpoint pen, charcoal, felt tip pen, chalk, crayon, pen and ink.

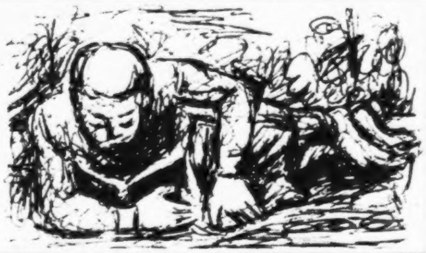
ADDITIONAL ACTIVITIES:

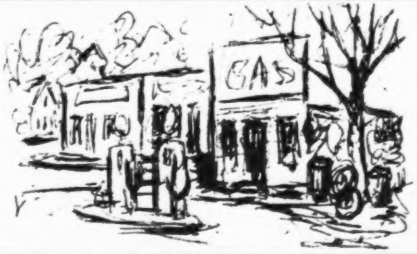
Preliminary studies for finished drawings and paintings.

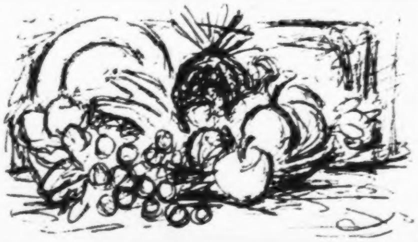
Finished sketches in extended gesture.

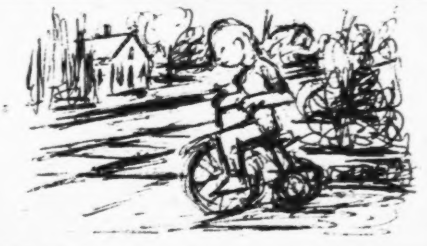


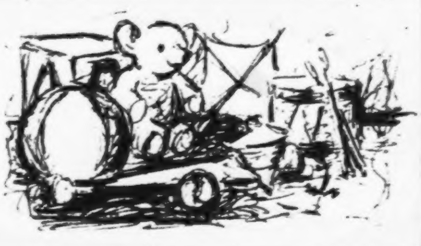


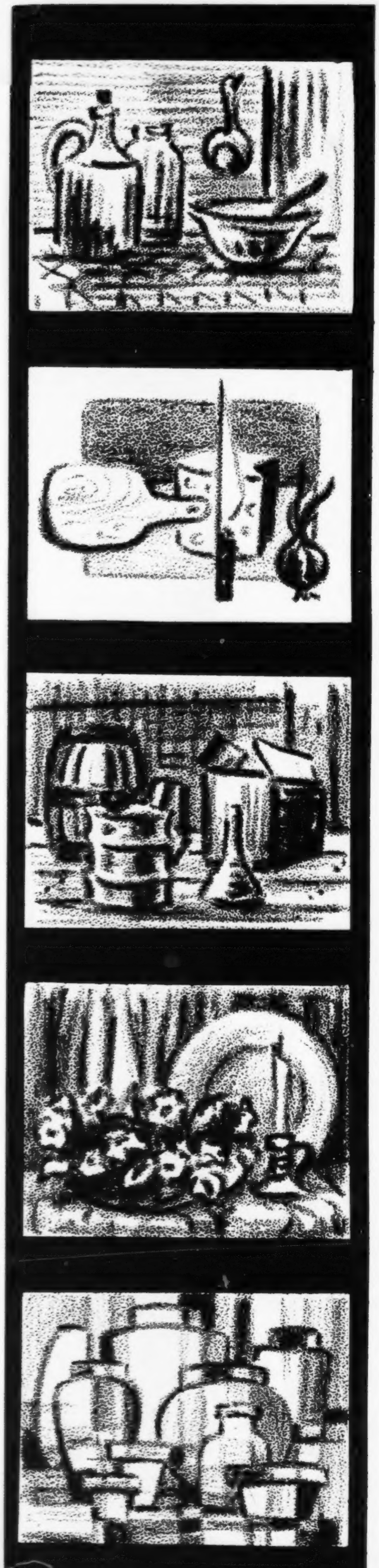












Drawing Grease Pencil...

Line drawing and shading with a grease pencil is rendered in a manner similar to the techniques we use with a graphite pencil. Although a wide range of value is possible to achieve, the medium is most prized for the strength and boldness of its rich black when used spontaneously for sketching. It is a traditional medium for political cartooning.

Apply in line stroke.

Vary color and weight of line by pressure and by retracing strokes.

Use boldly for free sketching.

- Hatch and crosshatch for texture and shading.

Use carefully for tonal shading.

- Vary shading by blending tonal values with the pencil point.
- Smudging with finger or paper stump is not effective, therefore not recommended.

Use on rough textured paper.

- The pigment marks the top surface patterns leaving the indented patterns the light of the paper. A shaded area of broken or pitted color is produced.
- Gradations of color value pitted by textured paper may be reproduced commercially in a line cut process.

MATERIALS:

China marking, lithographic pencils, textured paper.

ADDITIONAL ACTIVITIES:

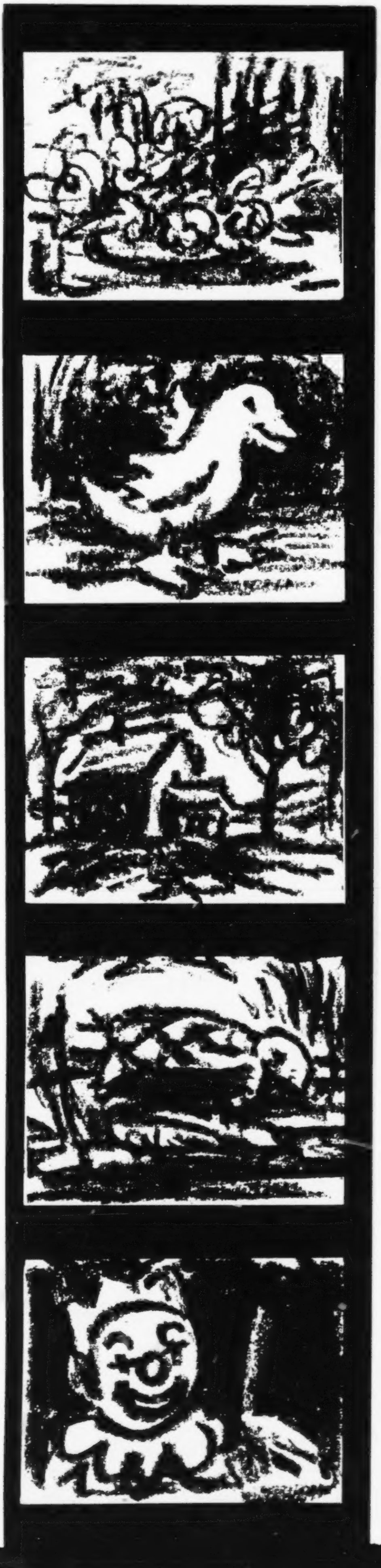
Drawing on stone, metal, or paper plates for lithographic printing. Combine with grease crayon.

Combine with crayons and liquid tusche.

Drawing Wax Crayon...

Wax crayon responds well to a free sketchy technique. The soft medium of the crayon encourages bold statements in broad line and rich coloring. Where careful rendering is desired, crayons of varying degrees of hardness are available for use.

- Work boldly and directly, drawing and shading in a spontaneous manner.
- Use one color, varying values from light to dark.
- Shade solid areas blending with point of crayon.
- Shade using line and texture strokes.
- Vary texture by lifting crayon from shaded areas by pressing tip of crayon to paper and lifting up quickly.
- Vary texture by etching shaded areas with a sharp pointed knife or pin.
- Use more than one color mixing and blending with overlapping strokes.
- Use more than one color stressing outline by the use of black or other dark colors.



MATERIALS:

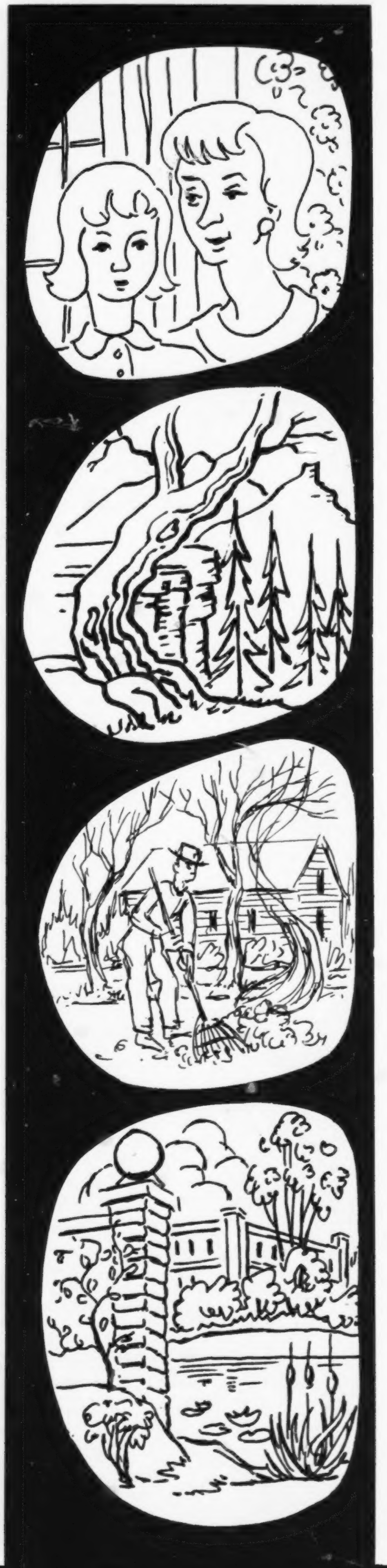
Wax crayons
Oil crayons
Paper
Liquid tusche
Grease crayons
Watercolor crayons

ADDITIONAL ACTIVITIES:

Combine with an ink wash.

Combine with a watercolor wash.

Combine with a liquid tusche technique.



Pen and Ink Drawing...

The pen point produces a crisp line drawing, concise in style of rendering. Variations and freedom of the line quality and drawing technique are determined by the type and flexibility of the metal point.

- Flexible nibs with fine points.

  With a light touch draw with thin sketchy lines.

  With varying pressure to spread flexible point, draw with thick and thin lines.

- Rigid metal nibs with fine and medium points.

  Use for controlled lines with little or no variation in width.

  Vary width of line by retracing.

- Rigid metal points with round points.

  Use for broad lines of equal width.

  Use for bold outlining.

  Retrace parts of line for thick and thin variations.

- Rigid and flexible metal nibs with square points.

  Draw broad stroke lines by pulling point forward.

  Draw thin stroke lines by moving point to side.

  Alternate directions within a single line stroke for thick and thin variations.

MATERIALS:

India ink, penholders, and penpoints and paper.

ADDITIONAL ACTIVITIES:

- Use found materials for pen points. Twigs with broken or frayed tips, sticks, swab sticks, match sticks, tooth picks, etc.

- Make old style quill pens. Sharpen and split turkey and goose feather tips. Sharpen, split bamboo, balloon sticks, or sucker sticks.

Pen and Ink Drawing...

SHADING

A line stroke shading technique is used for rendering a shaded pen and ink illustration.

- Parallel Strokes

  Vary color by the closeness of stroke.

  Vary color by the thick and thin line.

  Vary quality by length of the strokes.

  Vary quality by direction of strokes, straight, curved, wavy, or zig-zagged.

  Vary quality by controlled drawing or free technique of drawing.

- Crosshatch

  Overlap parallel strokes alternating directions. Each layer darkens value of shaded area.

  Vary color by the closeness of stroke.

  Vary color by leaving parts of previous shading strokes as light values.

  Alternate strokes and cover only the areas of each succeeding darker value.

  Vary quality by controlled or sketchy technique.

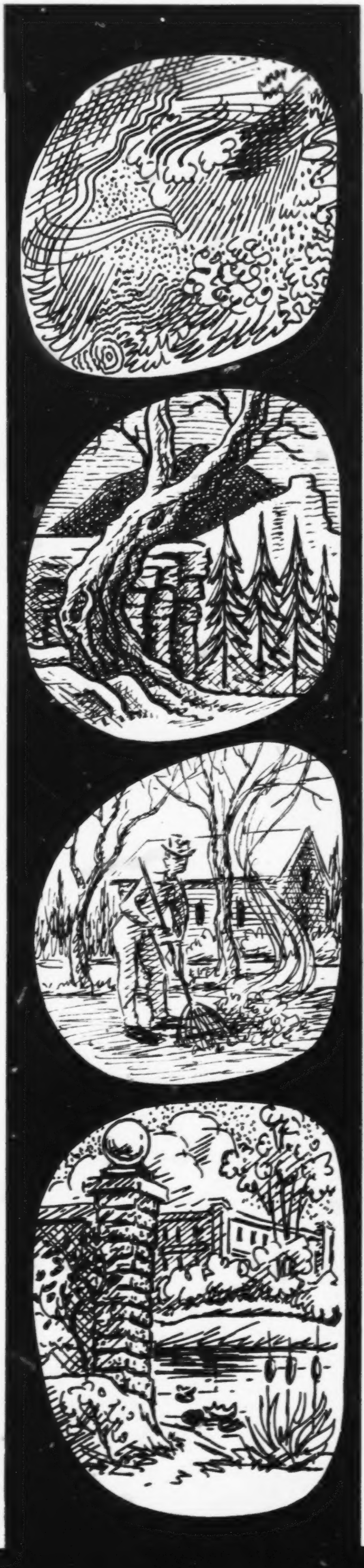
- Textural Shading

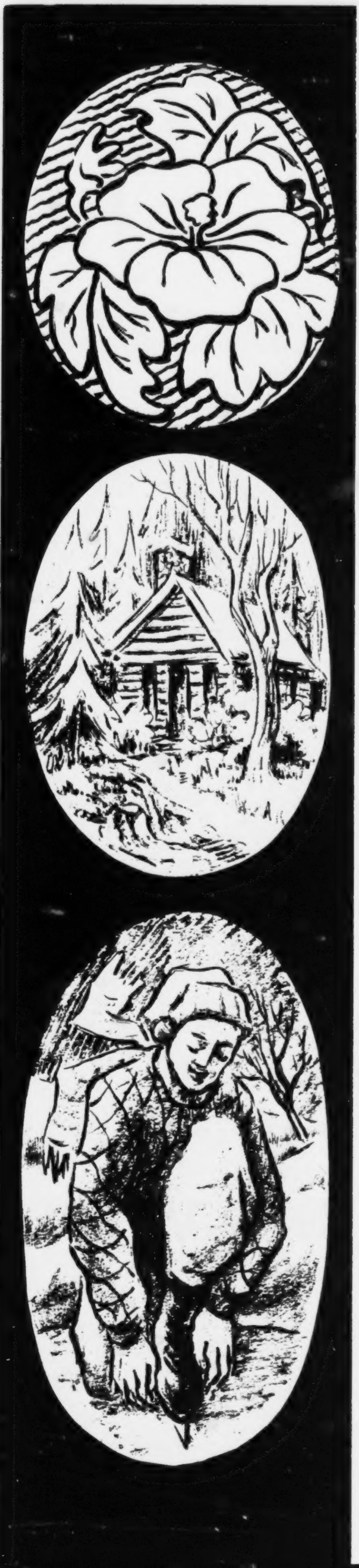
  Add variety and interest to line strokes shading by:

  - Stipple — dots made by pressing point of pen directly to a paper.
  - Splatter — dots made by flicking point of pen to release ink in an irregular blob.
  - Dashes — broken lines made of short strokes of the pen points.
  - Natural Texture — imitation of surface qualities using outline strokes in group patterns to vary color of areas and explain the nature of the form.

ADDITIONAL ACTIVITIES:

Combine with other media — ink wash, and dry brush, chalk, watercolors and tempera paint.





Brush and Ink Drawing...

BRUSH LINE

Draw quickly and freely with a watercolor brush.

The quality of line varies with the type brush.

- A round brush best for a bold, broad line.
- A pointed brush, especially a Japanese one, very good for a thick and thin line.
- A worn brush suitable for an irregular line.
- A square tip brush for a chiseled edge thick and thin line. Excellent for lettering.

Outline and shade using hatches and crosshatches.

DRY BRUSH

- Use a round, pointed, or square tipped hair or bristle brush.
- Wipe on paper towel until almost dry — let the bristles separate.
- Apply lightly to produce shaded values of broken color.
- Blend graded values working coat on coat until the darkest values are achieved.
- Add accent lines in dry brush or any other brush line technique.
- Combine with pen line for variation.

MATERIALS:

India ink, brushes of all types, paper.

Brush and Ink Drawing...

INK WASH

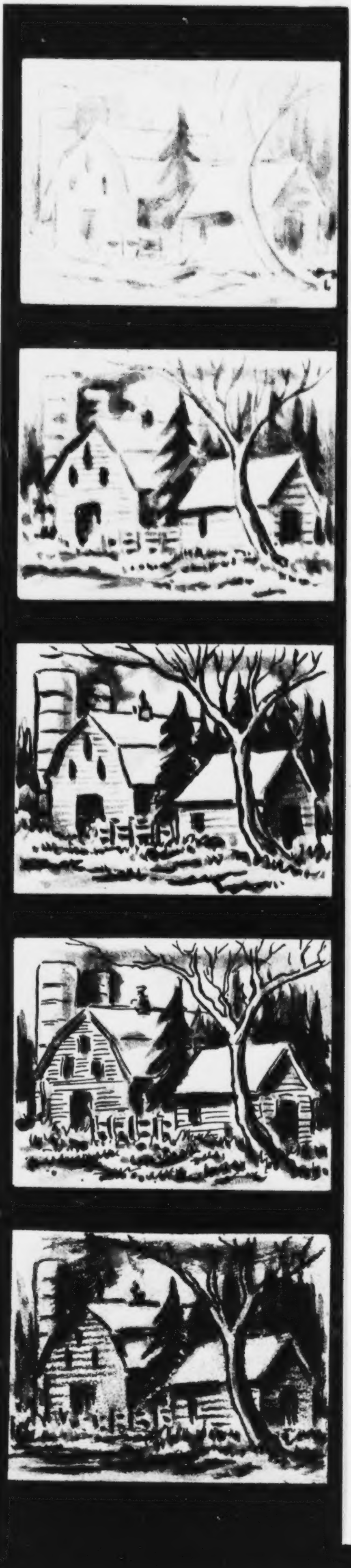
Mix the ink with water. Use several containers, a mixing pan with compartments, and mix the various gray values from light to dark.

Apply light values to all areas of drawing, leaving the white of the paper for highlights.

Apply darker values, allowing each to dry between applications. Blend value into value overlapping with brush strokes.

Drawing may be completed with washes with no linear description, modeling, dimensional form and space, with gradations of color value.

Linear descriptions may be added with a brush or pen or both.



FOR VARIATION:

Apply dark values to light values before they dry allowing color to blend.

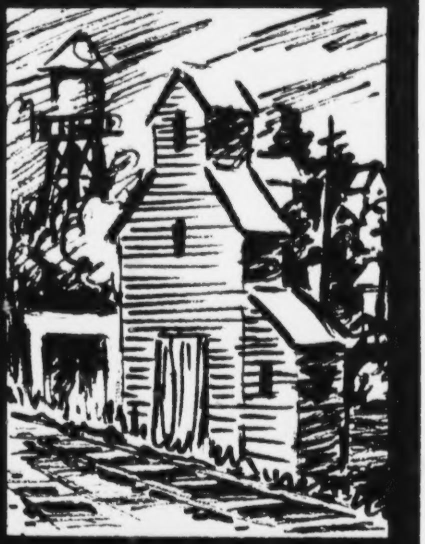
Keep entire sketch damp working, blending dark and light colors in manner similar to the wet in wet technique.

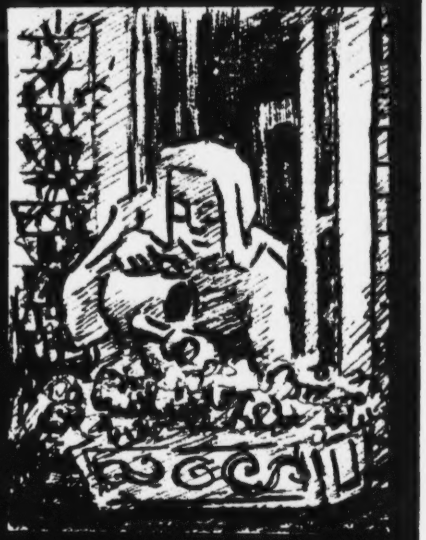
If the paper dries — dampen it with clear water and continue working.

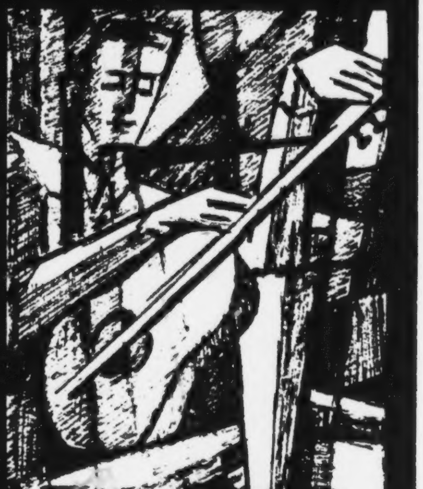
Interesting lines and textures with pen point may be added to the wash technique. Allow some strokes to blur into the damp areas, others to stay crisp on dry areas.

MATERIALS:

India Ink, Watercolor brushes, Mixing pans. Paper.







Felt Point Pen Drawing...

A felt point pen is a flexible drawing medium, with smooth points and free flowing ink. The pens may be available in fountain pen sets with replaceable or refillable cartridges and interchangeable points.

Other styles are inexpensive and disposable pencil slim penstaffs or stubby marker type cartridges.

The ink varies from a water soluble medium to a volatile oil medium and may be obtained in many colors.

Points vary in size and shape, square, round, pointed, and are broad to fine line in thickness.

- Draw and shade using line stroke technique.
- Vary line quality for outlining or shading by the type of point.
- Vary color and weight by pressure on point to control flow of the ink.
- Overlap and crosshatch strokes for value variations. Some bleeding of the ink will achieve a broadtone quality in the otherwise line stroke shading.
- Use pens of various freshness. A new pen flows freely and too easily produces the dark values. An old pen flows less freely and permits more control of light to dark.
- Excessive ink flow may be controlled by wiping point on tissue or paper toweling to dry out the point.
- The ink is transparent. Line and shaded values have a wash quality. This is most effective when combining more than just one color in a drawing.

MATERIALS:

Felt point pens, felt point markers, paper, — suitable to all types.

ADDITIONAL ACTIVITIES:

Combine with transparent watercolors.

Combine with colored chalk drawings.

Ball Point Pen Drawing...

A continuous flow of ink and an easy movement of the smooth point of a ball point pen make this an effective tool for sketching. The line quality is thin, regular in color and weight, more than that of other drawing mediums.

Draw and shade using a line stroke technique.

Variety of line is achieved by the ease of a directional change.

Variety of weight and color is controlled by pressure on the point but more often by the retracing of lines.

Controlled line stroke outline and shading produce drawings of delicate quality.

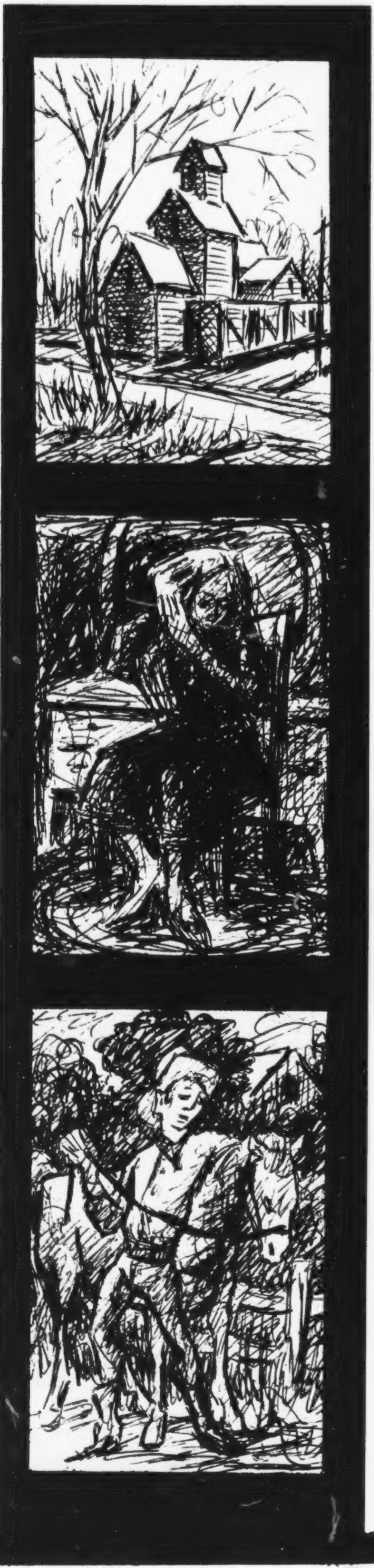
A free sketchy use of the pen produces bold scribble drawings.

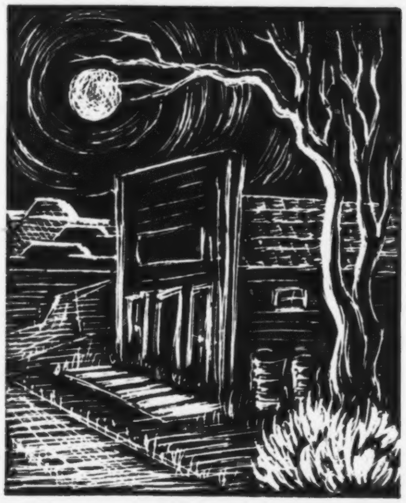
Various colors are available and may be used together in one drawing with an interesting effect resulting.

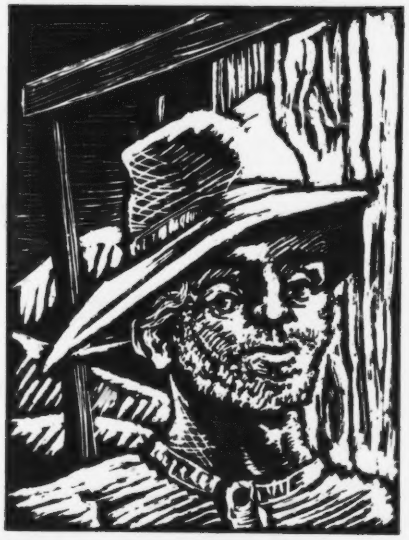
Red, brown and black ink gives the most pleasing results in color gradation from light to dark values.

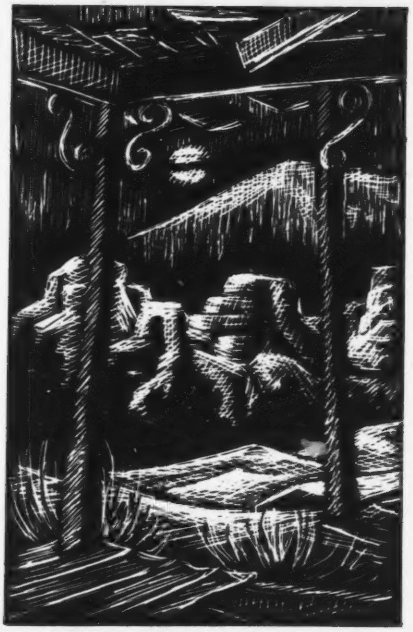
MATERIALS:

Ball point pens of various colors, paper.









Drawing Scratchboard...

Scratchboard drawing imitates the prints of wood engraving and wood blocks. Sharp lines and light and dark patterns with crisp edges are characteristics of the ink technique used here.

- Cover scratchboard with a coat of ink. Use a brush, give the paper a flat, even coat black. Two coats may be necessary for even coating.

> Scratchboard paper is a special paper commercially prepared. It is coated with a fine white plaster.

- Trace drawings on inked surface using some chalk covered paper as a carbon.
- Scratch out the desired lines with a sharp pointed tool, scratching through ink layer to expose a white plaster coated paper.

> Scratchboard tools that fit into pen holders are the best points to use.
> Pins or needles work satisfactorily.
> Sharp pointed knives may be used.

- Line and shade in stroke and crosshatch.
- Add texture and shading variations with: dashes, dots, gouges, and linear symbols of natural texture patterns.
- Scoop out large areas of white with broad side of knife or scratch tool.

> If areas of white are large and predetermined — do not cover when applying ink coating.

- Scratch away as little as possible of the plaster coating.
- Corrections may be made by adding ink. Allow to dry, then scratch through again.

MATERIALS:

Scratchboard, India Ink, Brush, Scratch Tools.

Ink Drawing Scratchboard...

If scratchboard paper is too expensive or too difficult to obtain, an inexpensive and convenient paper substitute may be used.

White, wax coated, freezer paper.

Kitchen wax paper.

Wrap around stiff cardboard. Tape to back with masking tape.

Add opaqueness to kitchen wax paper by using a white cardboard or by covering the cardboard with a white drawing paper.

Dust surface with talcum powder. Rub into the wax coat. Brush off the excess powder.

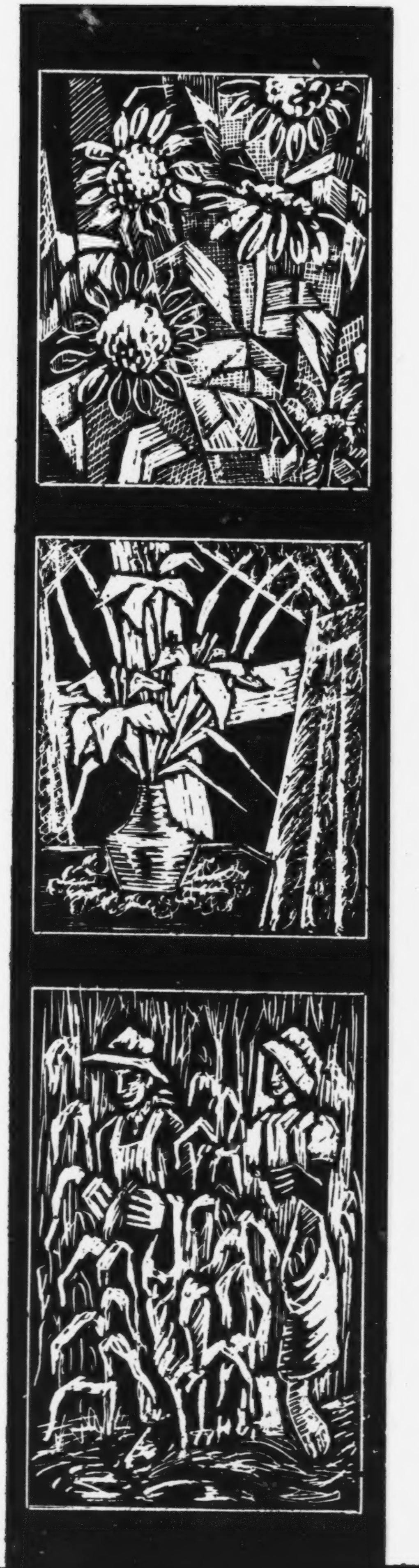
Cover with an ink coating.

> If ink does not adhere easily, rub on a light coating with a tissue or cotton. Allow it to dry. Apply with brush any additional coats necessary.

Transfer drawing to the inked paper and scratch out designs with a sharp pointed tool.

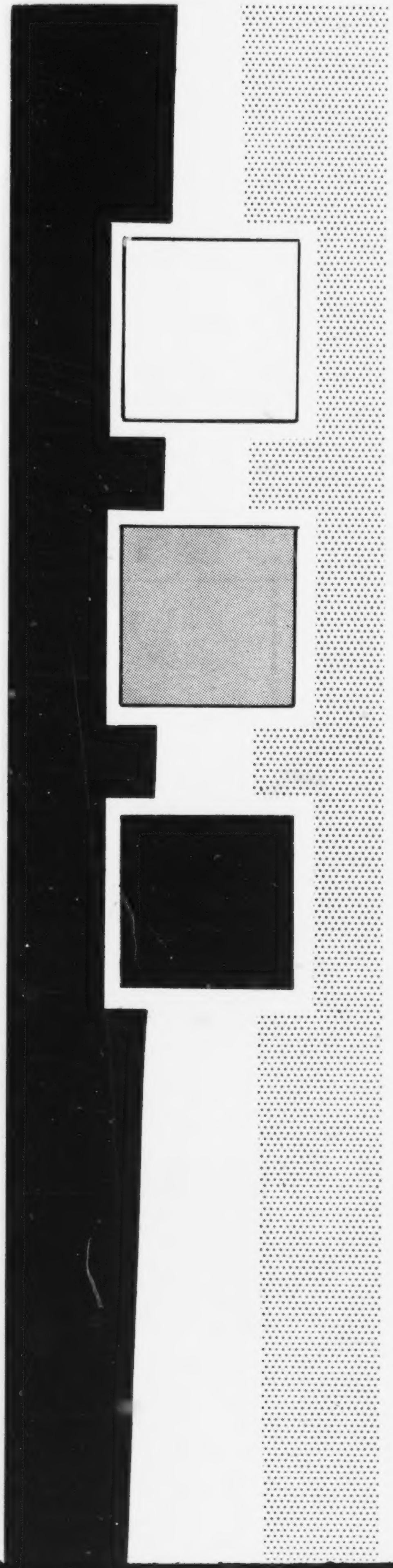
Lines and edges may not be as one would like, such as the crisp type made on regular scratchboard. The lines are nearer to the irregularity of a wood cut.

The ink and wax scratched away in above process are not as easy to brush aside as are the ink and plaster of regular scratchboard.



MATERIALS:

Waxed Paper, Cardboard, Talcum Powder, India Ink, Scratch Tools of various kinds.



Design Color...

Color is emotional when it suggests likes and dislikes and preconceived ideas. Association through experience gives personal meaning to color and color relationships.

- Use color symbolism to depict pleasant and unpleasant experiences.

  Suggested topics:

  Green is sickly or fresh as spring.
  Red shows anger or danger. Red is carnival gay.
  Yellow is cowardly or bright as a summer day.
  Blue is truth. Blue is sad.

Color is intellectual when it depends upon understanding and contemplation. It aids in the identification of an object or situation.

- Use color for identification and description.

  Suggested topics:

  An apple is ripe when red, or an apple is green.
  Seasonal landscapes have their own identity.
  Days have mood — a sunny day — a rainy day.
  Time of day has light and color — noon day, sunset, moonlit night.

Color has three properties — hue, value, and intensity.

- Use the three primary colors to mix all other colors.
- Use color for contrast of hue, value, and intensity.
- Use color to blend from light to dark and bright to dull.
- Apply color to abstract design to discover the properties of color by mixing and blending.

Color has temperature. Warm colors advance in space. Cool colors recede in space.

- Use color to blend from warm to cool.
- Paint realistic subject matter to observe natural effects of light and color.
- Use color and real form to depict abstract mood or idea.
- Use color in free form design to depict abstract mood or idea.

Design Color...

Make a color wheel showing primary, secondary and intermediate colors.

Make a value chart showing nine gradations from white to middle gray to black.

Make a value chart for each primary color. Relate to gray value chart adding color to white for light values and black to color for dark values.

Make an intensity chart. Use a primary color and its secondary complement at full chroma. Mix in proportionate amounts for neutralization, from full chroma to middle gray.

Experiment with color based on color wheel relationships.

- Paint decorative designs using mechanical color schemes, such as triad, monochromatic, etc.

- Paint designs emphasizing neutralized color.

  Black, white, and gray.
  Color plus black.

Apply color experiments to —

- Decorative designs — color for enrichment.

  Stitchery
  Printing
  Ceramics
  Textiles

- Painting — color for description and mood.

  Abstract and realistic landscapes, still life, birds, animals, flowers, figure study, etc.
  Non-objective design.

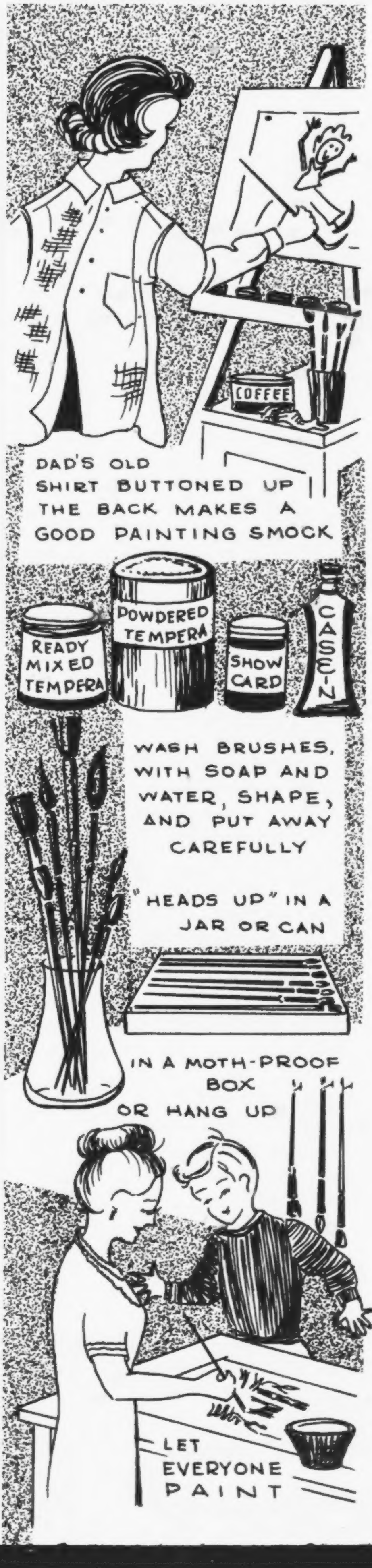
- Three-dimensional construction — color for depth.

  Use color to describe and enrich planes of structural design.

- Stage Design — color and light.

  Use color and light to express emotion and mood, enhancing the theme of a play, operetta, or ballet.

  Use color and light to enhance the setting for concerts, dances, parties, and pageants.


COFFEE
DAD'S OLD SHIRT BUTTONED UP THE BACK MAKES A GOOD PAINTING SMOCK
READY MIXED TEMPERA
POWDERED TEMPERA
SHOW CARD
CASEIN
WASH BRUSHES, WITH SOAP AND WATER, SHAPE, AND PUT AWAY CAREFULLY
"HEADS UP" IN A JAR OR CAN
IN A MOTH-PROOF BOX
OR HANG UP
LET EVERYONE PAINT

Gouache Painting...

GOUACHE PAINTING includes all opaque and semi-opaque paint in which water is used as a vehicle. It includes TEMPERA, POSTER, SHOW CARD and CASEIN paints.

Children's first experiences begin in the kindergarten with powdered or mixed TEMPERA. Their activities range from pure manipulation through surface enrichment to picture painting. (TEMPERA can be used in High School and beyond.) At first, a teacher should be primarily concerned with providing suitable materials, challenging motivation and personal encouragement rather than with techniques and method. LET THE CHILDREN PAINT THEIR OWN IDEAS IN THEIR OWN WAY as they explore the characteristics of the paint: its opacity, how it covers, mixes, and dries. Discover brush stroke textures.

Use ¾" soft and bristle brushes, one for each color if possible. News print, manila, and construction paper are suitable. Kraft or wrapping paper is good for group murals. Spread newspapers and dampened sponges, simplify cleaning up. If there is no water in the room, provide two pails — one of clean water and one for used water. Use individual coffee cans to hold water. Muffin tins, TV dinner trays, baby food jars, cut down milk cartons, or other containers will hold paint. At first, the teacher will have to ready the paint: primary colors, black and white. If powdered paint is used, mix two parts of paint to one part of water. Liquid starch added to the paint will prevent "runs" at the easel. Paint on the table, at the blackboard, on the floor or at an easel but LET THE CHILDREN PAINT.

As the child progresses, he will use a greater variety of subjects, assume more responsibility, employ more meaningful evaluation, and show greater concern for design. Introduce POSTER and SHOW CARD paints. Later, he may use CASEIN paint. This flexible, water soluble tube paint has a binder of dried milk curds. It dries fast, flat, waterproof, and permanent. Colors are intermixable. Diluted it resembles water color. Used in thick impasto it has the look of oil paint. Corrections can be made after it dries and a coat of painter's varnish will protect it.

Use water color brushes on illustration board, water color paper or canvasette. Painting can be done on a gesso panel (Masonite covered with 3-5 coats of glue solution or commercial gesso mixture and sanded when dry.) Use a white porcelain tray or a slab of glass for a palette. CASEIN is well suited to large paintings or murals and is very satisfying.

VIRIDIAN GREEN
YELLOW OCHRE
OILS
FOR THE ADVANCED STUDENT

Oil Painting . . .

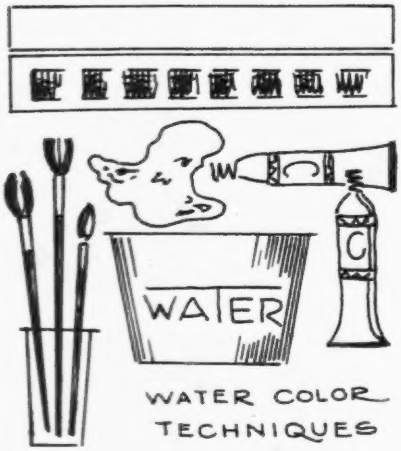
OIL PAINTING, as such, was developed in 1410 by Hurbert Van Eyck of the Flemish School while he was experimenting with varnish glaze over tempera. A mixture of linseed oil, turpentine, and varnish makes the medium in oil paint. The varnish serves as a drying agent. Masonite, canvasette, or canvas painted with gesso will work as a ground for oils. Canvas works best since it allows the paint to dry from both sides. In contrast to synthetic paints, many people prefer oils because they dry slowly thus giving the painter a longer time to develop his work.

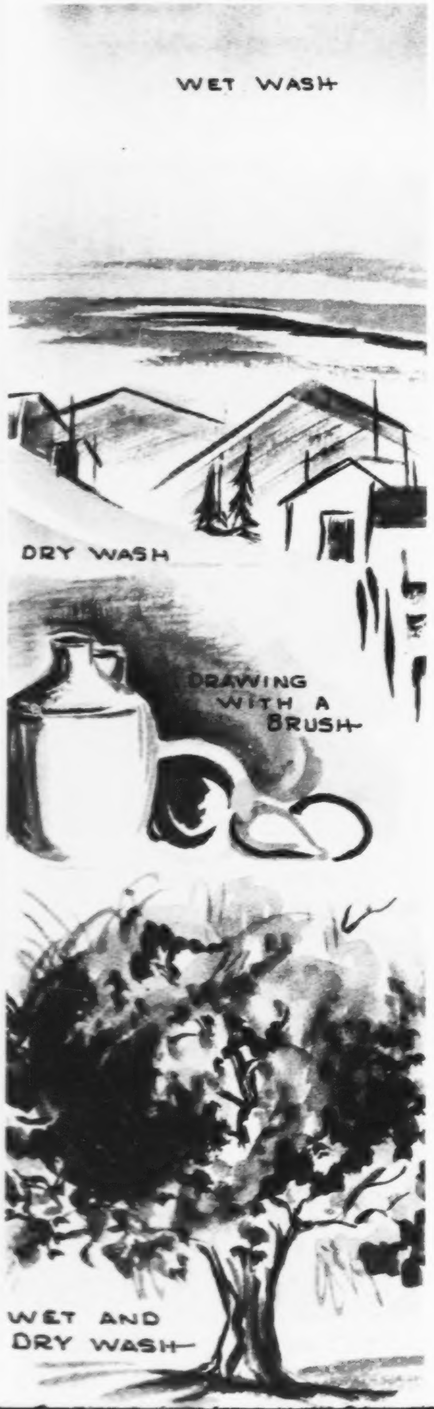
The same procedure used in synthetic methods is used in oils. The differences result from the technical aspects of the media. A light turpentine wash of burnt sienna is used to block in the painting. Since oil paint takes a long time to dry completely, the sealing coat of clear varnish cannot be applied for a number of months. It is a common tendency for the beginning student to paint over wet paint. It must be allowed to dry before it is painted over to prevent intermixing of colors. Most students are also timid in mixing colors so they must do some experimenting in mixing color on the palette until the desired color is found.

A 9″ x 15″ piece of double strength glass taped over a piece of white construction paper make a perfect palette. The white paper allows the student to see his colors accurately. Use a putty knife frequently to scrape off the dried paint. Cover the un-used paint with a piece of saran wrap between sessions.

The following basic colors can be purchased in different size tubes and give the student an adequate palette at a minimum cost: Zinc or Titanium White, Ivory Black, Yellow Ochre, Burnt Sienna, Burnt Umber, Ultramarine Blue, Alizarin Crimson, Viridian, Cadmium Yellow Light, Cadmium Red Light. Arrange these according to warm and cool colors on the palette.

Flat red sable brushes in ¾″ and 1¼″ are best and will perform well in many media. When they are well cared for, they will last many years. Good brushes are an imperative. A 5″ spring steel blade knife is used when a thick application of paint is desired or for mixing colors. Use a small fishing tackle box to store painting gear.





Water Color...

TRANSPARENT WATER COLOR is a flexible medium which will respond sensitively to the moods and whims of the painter. Due to its transparent quality, it is more difficult than opaque paint to handle and, therefore, should be introduced later.

MATERIALS AND TOOLS for the beginner include a box of 4 or 5 colors. As he progresses use 7 or 8 colors and later a box of 16. A gifted child will find tubes of artist colors challenging. For the beginner #11 round and ¾" flat brushes are recommended. They should have smooth medium length handles. For the more advanced student, a flat square type for precise edges and uniform tone, a #10 round pointed and a #5 flat oval (mop). Pointed bamboo is also good. Newsprint and construction paper are best for the beginner. Later introduce textured water color paper which can be soaked and taped to a board to stretch. Sponges, coffee can for water, cover up smock and charcoal for sketching. If there is no water in the room, provide two pails — one for clean and one for used water.

EXPLORE THE EFFECT OF WATER COLOR ON DIFFERENT SURFACES:

WET WASH	— wet paper with a sponge or brush, paint while wet.
DRY WASH	— paint directly on dry paper.
GRADED WASH	— drag the brush in overlapping rows until all the paint is painted out.
OVER PAINTING	— paint lines and shapes over light color.
BRUSH STROKES	— pull, roll, stipple, press dry brush, lots of paint, little paint, and brush dipped in more than one color.
COLOR MIXING	— As paint meets water it will mix, run, and blend.
SKETCHING	— with a brush full of light color.
DEVELOP "MOODS"	— as an idea is refined in water color.

EXPERIMENT IN PROCEDURES

Wash light background, dry overpaint details in darker tones.

Wash light background, overpaint while wet and then add the details.

Paint center of interest first, add background.

Sketch entire composition, paint in areas working from background to foreground in light and dark sequence.

Combine wet and dry washes.

Leaves bits of unpainted paper for "sparkle".

Combine with other media: crayon, ink, paper, etc.

Finger Painting...

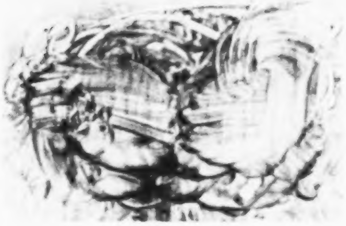
MATERIALS AND TOOLS

- FLAT SURFACE on which to paint as a table, slab of glass, Formica, or similar material.
- FACILITIES FOR WETTING PAPER. If there is no sink in the room, sponge water on the table and lay the paper down or use a flat pan (cake pan or roaster) for immersing the paper.
- SMALLER PAN OF WATER for "sprinkling."
- SPONGE for cleaning up and for texture effects.
- NEWSPAPER spread on floor for drying surface.
- IRON to press the wrinkled paper. Press with low heat on the back. REMEMBER PAPER SCORCHES.
- FINGER PAINT PAPER. 18″ x 24″. Use glossy side.
- SMOCK or cover up. Use dad's discarded shirt with collar and cuffs tucked under and buttoned up the back.
- FINGER PAINT, powdered or ready mixed. Use liquid starch (about 2 tbsp.) and dry tempera or homemade paint can substitute. (See recipe section).
- 10 eager FINGERS, WRISTS, HANDS, ARMS, ETC.

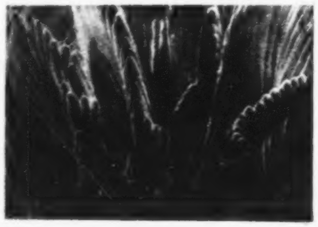
The most effective MOTIVATION is by individual or small group demonstration. Put name on the dull side of the paper, run it through the water, lay it flat on the table and smooth out air bubbles. This is done by lifting the corners of the paper while smoothing from the center. For the child's first experience, the teacher will have to ready the paint. Put about a heaping tbsp. in the center of the paper and spread with the hands. Use one color at first, then introduce others.

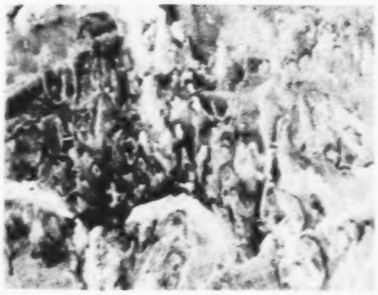
Show a few ways to use the fingers, hands, arms, and wrists while giving ideas for keeping paint on the paper, "sprinkling" when the paint begins to "pull", how to lift the finished painting by the two lower corners and place it on newspapers, and how to evaluate the design. WATCH THE CHILDREN. WHEN THEY ARE DANCING INSIDE, STOP THE DEMONSTRATION AND LET THEM EXPERIMENT. End the demonstration at the high point of interest. If you have not covered all you had planned, tell them individually or in a small group.

TRY FINGER PAINTING TO MUSIC.

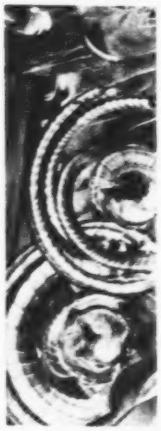


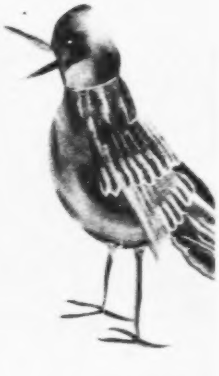
SELF IDENTIFICATION



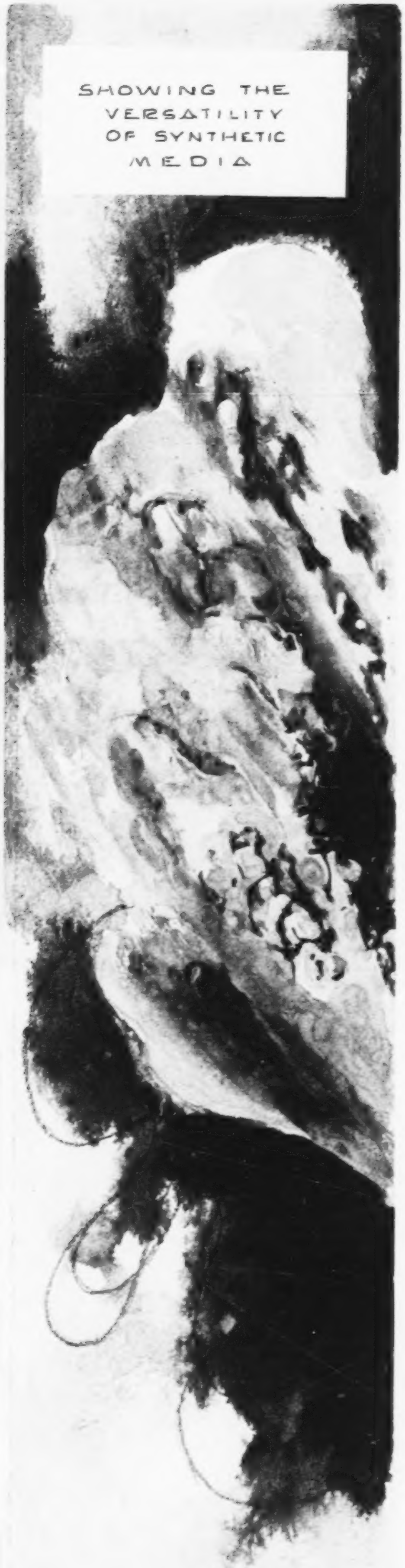


MONO PRINT





TEXTURE MONTAGE


SHOWING THE VERSATILITY OF SYNTHETIC MEDIA

Synthetic Paints...

SYNTHETIC PAINTS are new products which have been on the market for only a few years. They are quickly becoming popular and, in fact, are beginning to replace the traditional painting medium — oil. The ingredients in synthetic paints are either acrylic or vinyl resin. (Sometimes both). They are created through a chemical process: polymerization, which changes the physical properties of the substance without changing its composition.

Synthetic paints have a luminosity and a transparency of color previously unknown to any medium. They can duplicate the qualities of oil, watercolor, tempera, and casein. They will not yellow, discolor, crack, fade, or age. They are quick drying, highly elastic, and extremely adhesive. Caution: keep brushes in water. Once dry they cannot be cleaned.

The medium used with synthetic type paint is polymer. The paints and medium are water soluble and thus are easy to handle. The paint may be used from the tube thick and opaque or it may be thinned with water and polymer to a water color consistency. A coat of clear polymer over the finished work makes a good sealer.

Almost anything can form a ground for synthetic paint. Canvas, composition board, glass, etc., are used. ⅛" standard masonite painted with a coat of while gesso is preferred by some artists. Others prefer the traditional canvas or muslin stretched over a frame and prepared with a coat of gesso. The pressed wood makes a more economical and portable ground for the high school painter.

Pencil drawing and ink wash are necessary pre-requisites for the student who is beginning to paint. He must have a background in structural design in these media before he can make the transition to more complex painting mediums. A strong unit in drawing is recommended immediately preceding the painting unit. Ink wash is a transition between drawing and painting and involves elements of each.

The student should first develop a detailed pencil drawing and transfer it to his ground in a light pencil sketch. Then he should block in the general color areas with thin washes. This establishes basic color harmonies and light and dark areas early in the painting. The beginning student should be held to a simple palette. A monochromatic scheme works well in holding the student to tones and qualities of one color. When he understands color harmonies and mixing, his vocabulary of color may be increased.

Mixed Media...

Experimenting to find new combinations and uses for media is a characteristic of the contemporary painter. Many very interesting effects can be achieved by mixing two or more mediums and processes.

WATER BASE PAINTS can be brushed over heavy crayon to attain an attractive resist. The effect of fully loaded or semi-dry brush is seen. The crayon area could be wholly covered or spotted. Try a "sprinkling" of dry tempera from a shaker top can.

INDIA INK in a line or solid form will give charm to either a wet or dry wash of water base paint. The ink could be brushed over a heavily crayoned surface, allowed to dry, and etched with a nail file, bobby pin, or a discarded ball point pen. This combination of processes and techniques challenges the more advanced student.

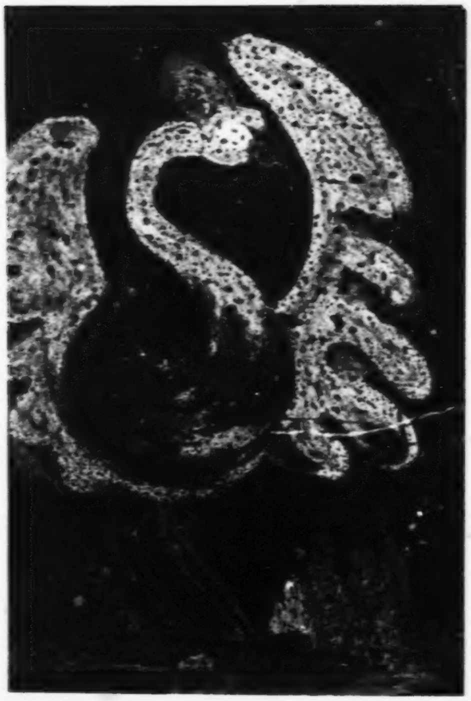
WAX CRAYONS make an effective accent for a water color. A highlight of crayon is very effective on water color paper where rough texture produces a charming pattern.

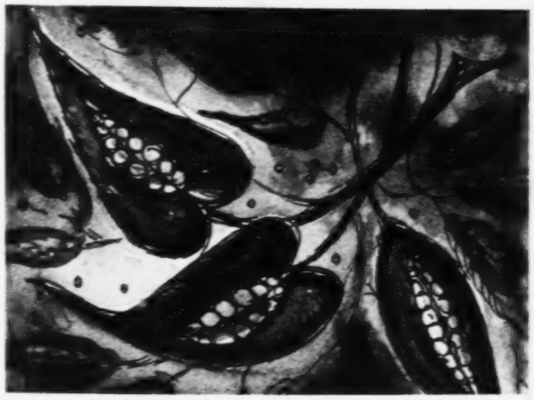
TEXTURE effects can also be achieved by the addition of sand, coffee, or other similar materials to acrylic color.

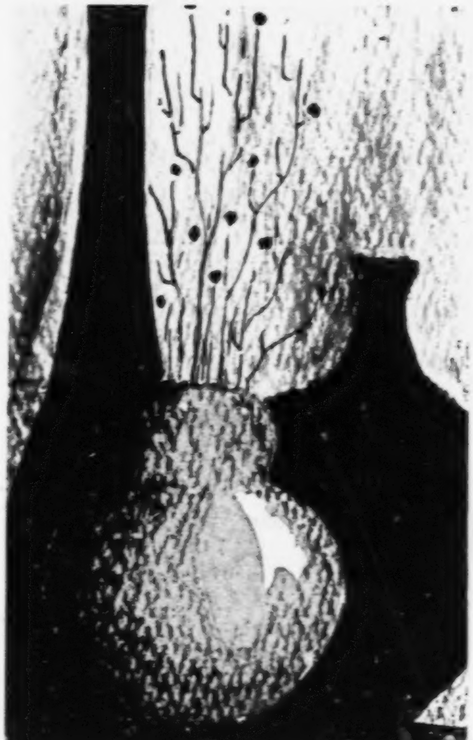
OVERLAYS of tissue paper, cardboard, decorated paper, or cloth pieces will accent some areas of the work.

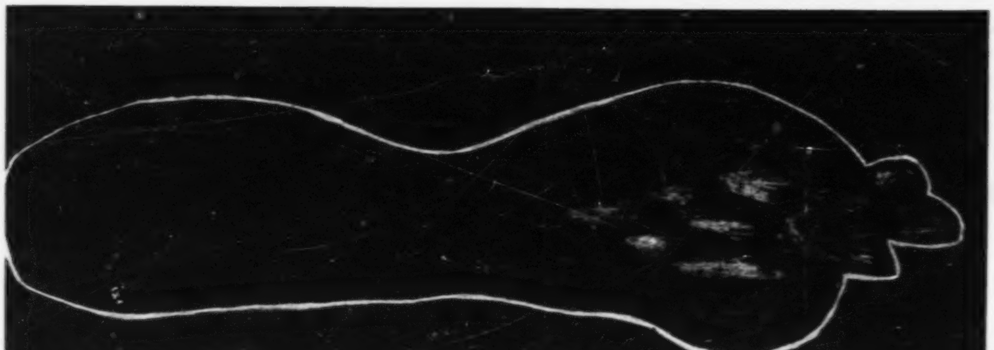
EGG and HONEY added to tempera are reminiscent of pre-oil paint days. They add a permanence and beautiful sheen to the paint.

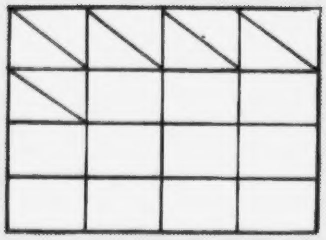
EXPERIMENT AND DISCOVER OTHER COMBINATIONS.

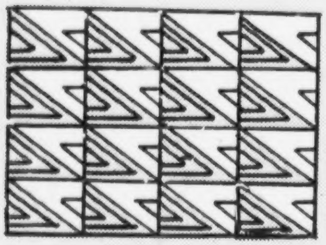


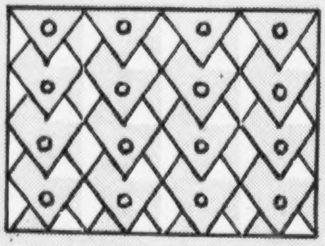


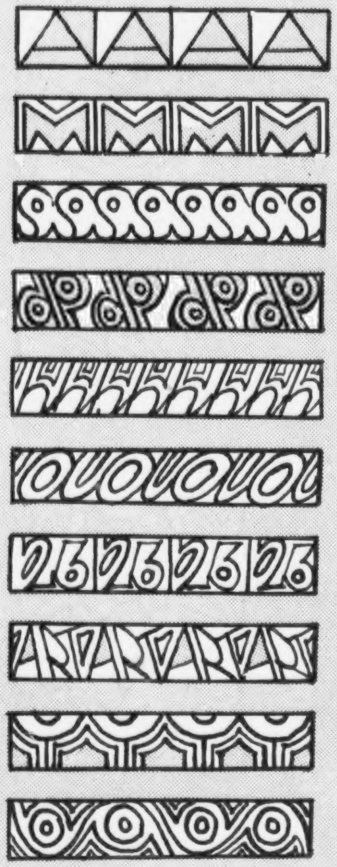












Basic Lettering...

Kindergarten children can be prepared for lettering and reading through design. After children have the process of an 8 or 16 fold mastered, spaces created by folding may be filled in a systematic way. Lines are drawn from corner to corner in each folded part and these diagonals become the basis for a repeated design. Starting with the left corner, top row, children will fill the space across the row, continue row two, and repeat until all of the rows are filled. We read the same way; left to right, line after line.

He may fill the whole triangle formed or add embellishments to the shape created. They may crayon, add cut paper pieces, or paint in the proper spaces.

The beginning letters suggested may be used in this manner as a basis for design ideas. X Y W V A M N H

The primary grade pupils might experiment by adding the letters not covered. Lower case letters, if they desire, may also be added. They might cut the strips apart and tape together to make one long continuous design. As they progress they may wish to try other approaches with more complex ideas. Use of the letters in the alphabet is just a springboard.

The illustrations at left show some of the possible results with manuscript and cursive letters. Rulers are not essential but careful folding is. Speedball pens can be used by older students for added design.

Problems in design can be devised for children who have learned their basic alphabets. Border repeated using verticals and alternating with letter shapes. Color the shapes so the letters become hidden. This can become an interesting game to children. You are teaching rhythm through repeats, space filling, and emphasis through color use.

Develop concepts of the different kinds of letters early so children will see a relationship with writing. A vocabulary such as: thick, thin, tall, heavy, wide, narrow, round, delicate, rough, short, graceful, irregular are terms used in relation with lettering, therefore, can become meaningful to pupils.

Try some yourself and get the feel of it. Encourage experimentation with cut paper, ink, or any combinations they may want to try. We suggest three dimensional styles for older children. They like these.

Lettering Projects...

Develop the confidence children need. To discourage copying use their initials or names as a project to achieve this. No two will be alike upon completion.

Print or write names on folded sheet with their crayons quite large . . . reverse fold so the crayon side is on the inside, rub to transfer the lettering, you will find a mirror-like effect results. Open, study the design created, and connect the loose ends until you feel a graceful composition. Reverse again, rub to transfer the added lines. Color the spaces created and look for people, bugs, faces, insects, etc.

An added project can be to add thickness to the letters. They can be cut out so that a spatter stencil technique can be used with paint or chalk.

The letters of the name are easily hidden if pupils try going around the letter forms repeatedly until no space remains. Colors may be warm, cool or related ones. A value scheme may be used, such as red to pink with variations or pale green to dark green. Many new ways to use lettering can be discovered to be an advantage for the creative pupil and teacher.

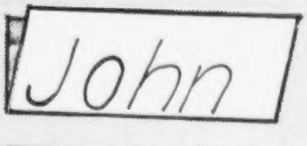
In the event of an error such as is illustrated, the cut letters of Alice, on the wrong edge of the fold. Make the child feel as if he has discovered another way rather than emphasizing he has made an error.

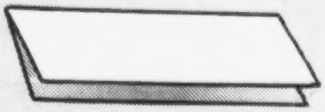
These letters can be placed under a clean sheet and rubbed over with crayon and pencil to reproduce the cutting. They may then be studied carefully for new possibilities of making new designs from them.

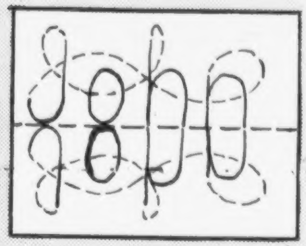
If both sections of the cut names are kept they can be used as stencils for spattering around, or if the other stencil is selected, for spattering into.

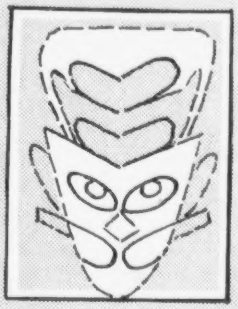
Children need lettering experiences. This is one of the skills all children may use in future work. The lettering problems should challenge student ability but not be so technical as to cause boredom.

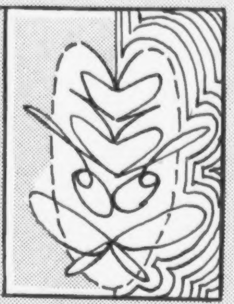
Through lettering you give the student an opportunity to develop sequentially, to help him gain further knowledge through exploration.

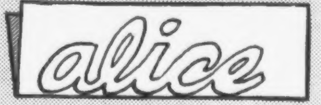


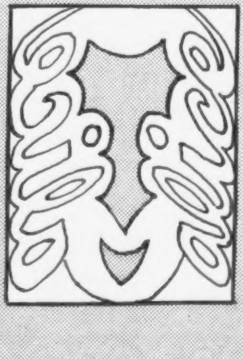


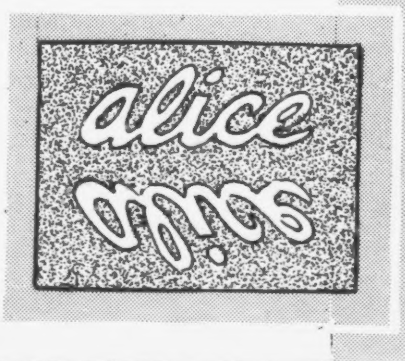


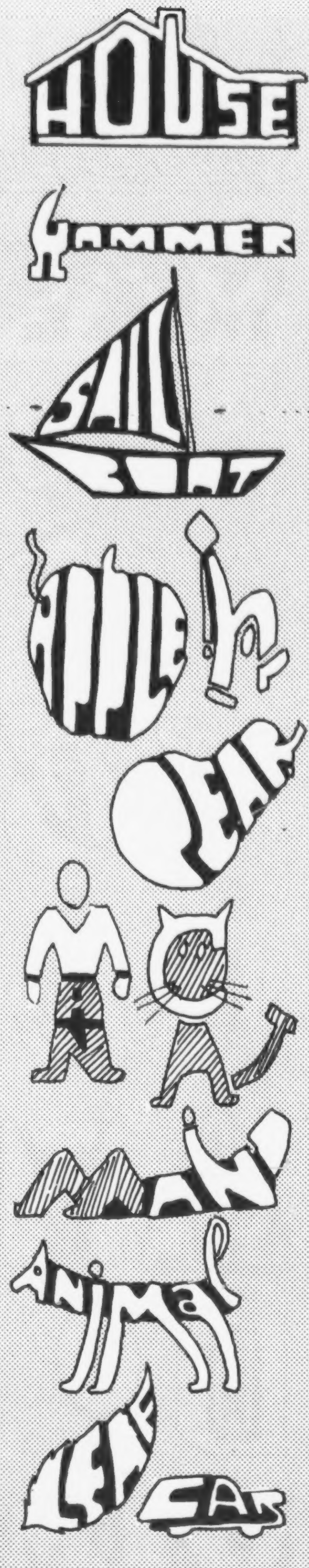












Word Fun...

Words which indicate an attitude or behavior for the pupils are good to study. Interest, behave, courtesy, effort, genuine, honesty, justice, patince, sincere, learn, truth, understand, work, etc. . . . these are some of the words that could be used to work out healthy, safety habits for posture and other activities.

Words can be converted to many forms which actually can make the shape of the word described. Examples at left. You may make a list of many more which may fit your needs. Let the children help make the list.

Children are intrigued by the challenge presented by the above idea. Words can describe a feeling or they may produce emotional responses from such as: speed, cold, hot, up, down, dignity, delicate, soft, sharp, strong, weak, solid, rough, gummy, flash, etc.

Note the illustrations at left are just a beginning. One could categorize sports equipment, tools, fruits, toys, objects inside a home, gadgets, natural forms, catalog of shoes, wearing apparel, foods, vegetables, numerous animals, fish, insects, birds, flowers.

Children need to have as many pleasant lettering experiences as possible. Save all kinds of samples of lettering, designs, trademarks, monograms, etc. Many older children can be tested on their enlarging ability for reproduction of letter forms they study. The child becomes aware that there are many kinds, types, styles and shapes in lettering. They discover lettering can be interesting and challenging.

Don't forget the illusion of dimension possible. The lower grades can do this with double letter cutting. By shifting the letters of contrasting colors, create the illusion of depth. Older students are challenged to make and draw letters in dimension which become a part of their perspective lessons.

One word of caution, if lettering is not properly presented, a dismal failure can result. If insistent on accuracy too soon, you can lead to frustration, hate, and boredom for lettering of any type.

Lettering in most schools is a hit and miss activity. Lettering is a disciplining type of activity, applied at the right age it can produce many benefits. The very young child will not be interested in the demands of extreme accuracy of lettering. The older pupil needs this as a challenge to his ability and achievement.

Lettering Monograms...

Draw around letters, repeating the lines till no more space is left. The illustration at right shows what can happen if every up and down stroke is made slightly heavier. The spaces between the lines could be roads and when they are colored, they become bands of color in which values and contrasts could be taught.

Words or names can be used in a similar way. Start with the simple and proceed to the complex . . . varying the width of the letters from wide to narrow, short or tall gives you another means of teaching emphasis or proportion.

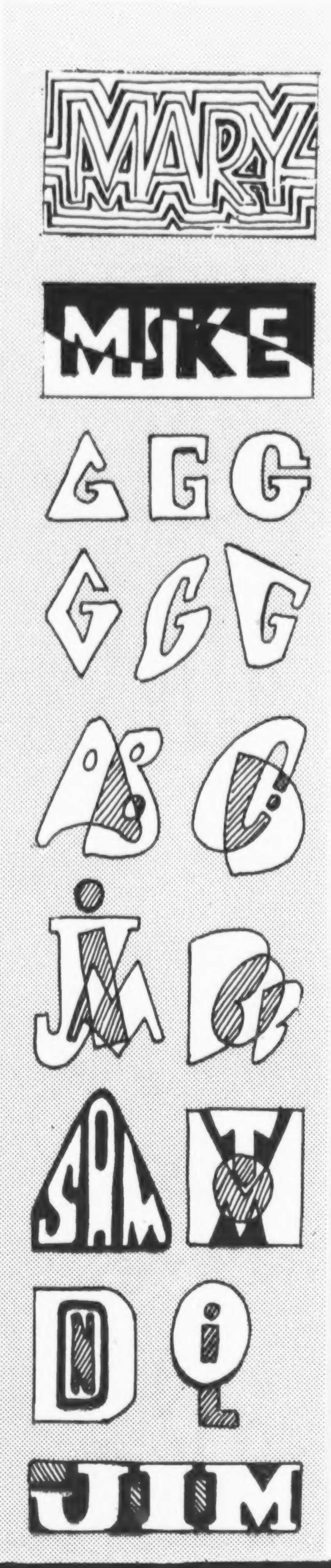
Light and dark designs from printing block letters, initials, or nicknames in the block style easily can be made. Draw a line through the letters. Lines may be straight, curved, angular, or wavy. Consider the line as a fence. On one side of the line, color the letter dark and the background light. Crossing the fence makes the letters light and the background becomes dark. No two designs will ever be the same.

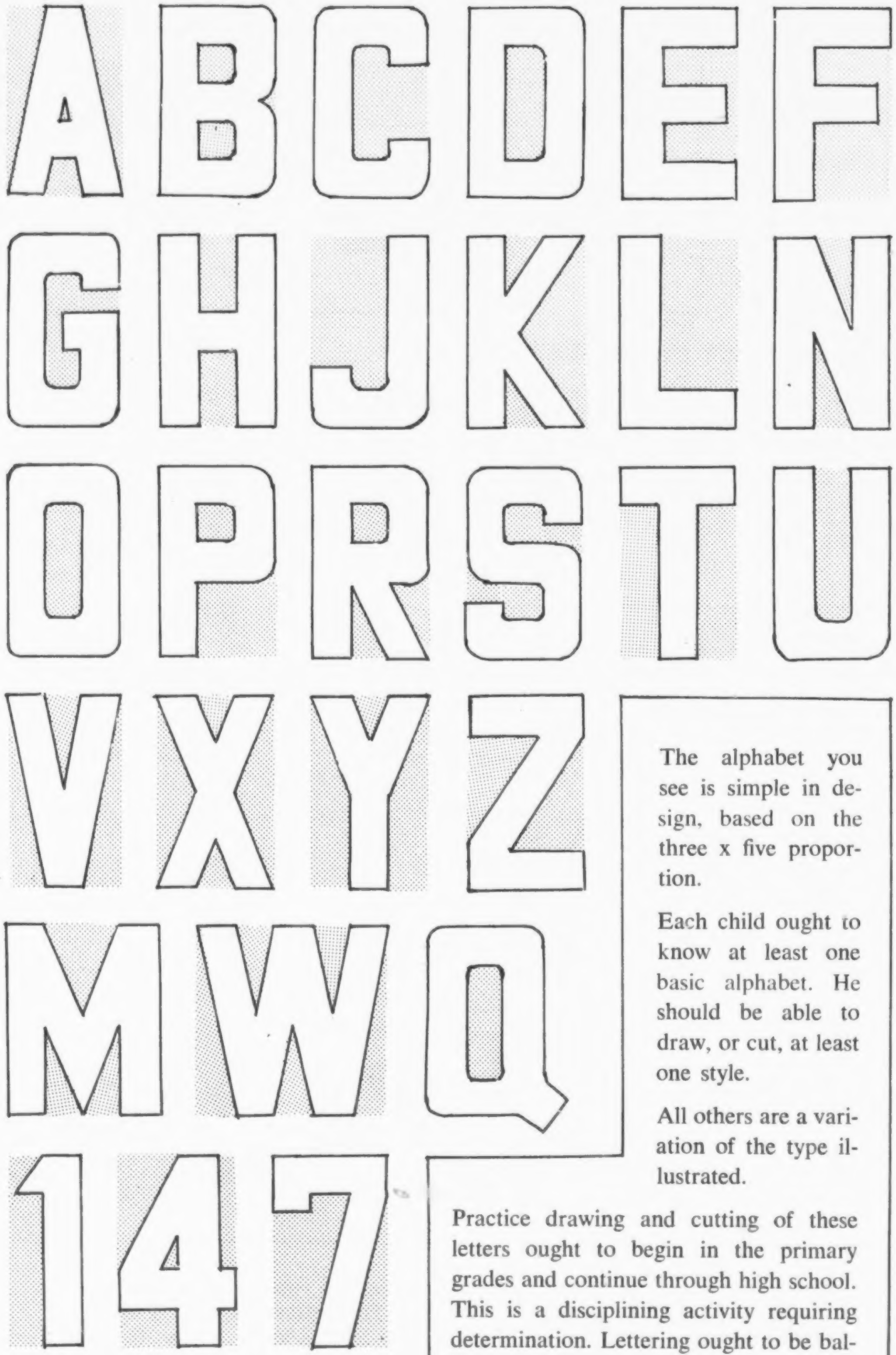
Use letter forms and make them fit into various geometric shapes or free forms. These make an excellent monogram. The addition of the overlap principle will help one to make some interesting results. Color mixing can be taught using the above method. Harmonies, values studies are also possible with this method.

Illustration at right indicates some of the countless possibilities from combinations of letters, initials, words. Can be used on personal stationery. Alphabet books using letters cut and pasted in a general arrangement will give them a simple poster beginning. Older pupils can cut simple five letter words and paste them on a contrasting color strip. They can be used in arrangement with the illustrations.

Simple sayings are good problems. Cutting paper letters or crayoning them will fit their short interest span. Use word statements such as: Be Good, Be Kind, Exercise Often, Play Safe, Help Others, Be Fair, Get Your Rest, Eat Good Food, Brush Your Teeth, etc.

One can teach behavior and attitudes through sayings, especially if the children think them up. Interest is keen and as their attention span increases, the time spent on lettering can also increase. Speedball pen lettering exercises can be used with right and left handed pupils if the ball type point is used.



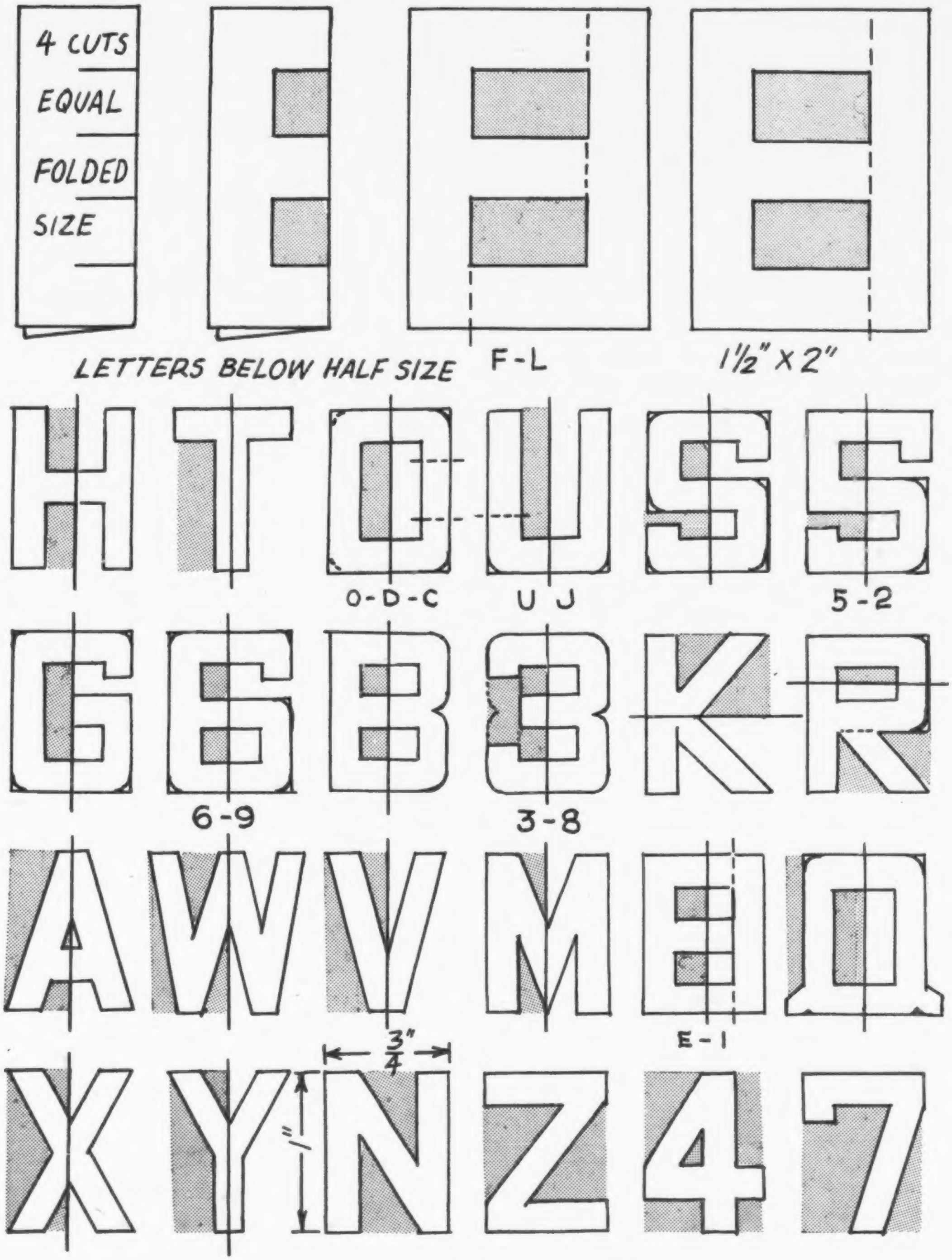

A B C D E F
G H J K L N
O P R S T U
V X Y Z
M W Q
1 4 7

The alphabet you see is simple in design, based on the three x five proportion.

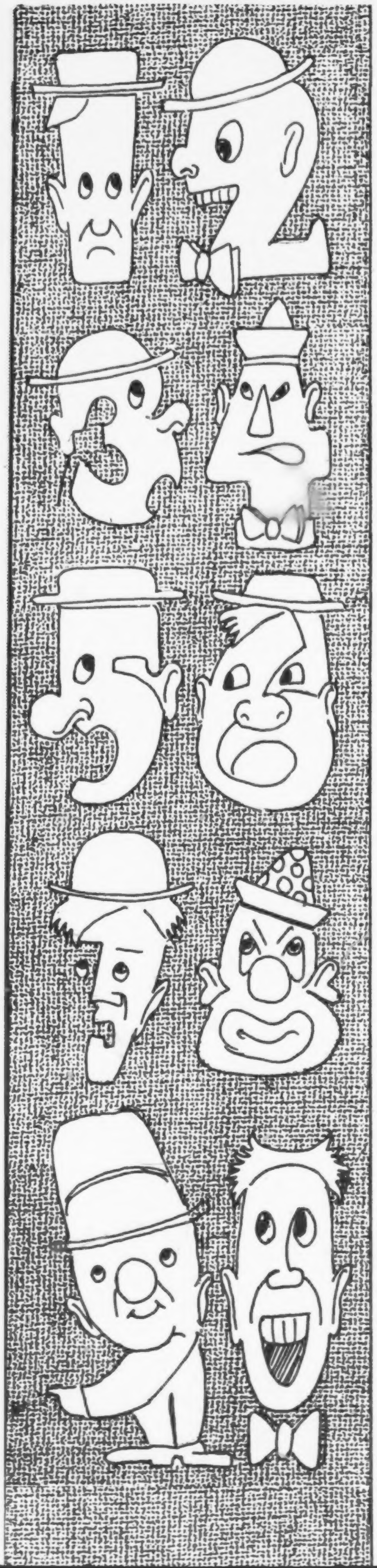
Each child ought to know at least one basic alphabet. He should be able to draw, or cut, at least one style.

All others are a variation of the type illustrated.

Practice drawing and cutting of these letters ought to begin in the primary grades and continue through high school. This is a disciplining activity requiring determination. Lettering ought to be balanced with other activity as shown on other sheets if we are to avoid boredom.


4 CUTS
EQUAL
FOLDED
SIZE
F-L
1½" X 2"
LETTERS BELOW HALF SIZE
O-D-C
U J
5-2
6-9
3-8
E-1
3/4"
1"

Cut paper letters art not difficult. If followed, all letters and numbers are possible with these exceptions . . . N-Z-4-7. These cannot be cut by folding. There are other styles that might be simpler for the lower grades. If space permits, this may be one style that may be included for your use.



Numbers as Motivations...

Numbers can be the basis for motivating student interest in cartooning. The illustrations at left show the possibilities when applied to faces.

Give children an opportunity to make the unusual variations to the shape of the numeral, allow experiments.

The following suggestions are additional for numbers:

Figures can also be the theme for numerals.

Animals — fish — insects and other themes can be utilized by the imaginative student.

Color can be taught with overlapping principle being applied when two or three numbers are overlapped. Colors are designated to each of the numbers, when two overlap a new mixture results.

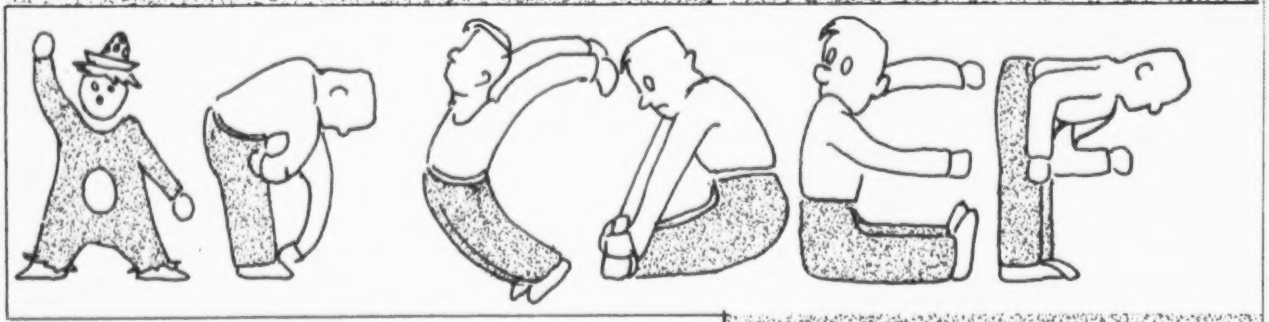
Numbers may be used as a basis for designs. The numbers act as space dividers, which if filled with color values, actually disguise the number.

Dimensioning numbers will develop student's spacial ability. Intrigues the youngsters.

Numbers can be quite flexible — form shapes which can result in these variations:

- Short and squatty or free formed
- Tall and narrow or heavy and solid
- Curved and graceful or irregular
- Circular — oval or bold — delicate

Do not overlook the possibility of space filling technique with number designs.



Alphabet of Figures...

The illustrations of figures making letters is an interesting way to motivate children to invent their own actions.

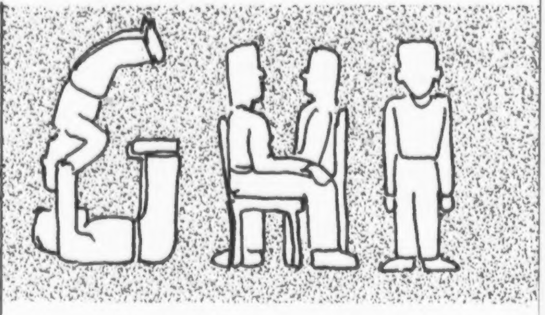
Keep the figure simple with very little detail. Have the children try to figure out variations to the actions. Apply them to play, exercises, sports, work activities, etc.

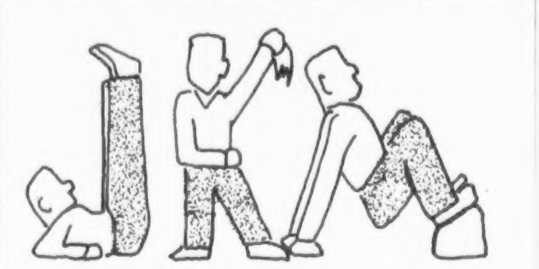
Children will enjoy thinking up the other possible changes they can create. Combine figures to make up words or their names as a project.

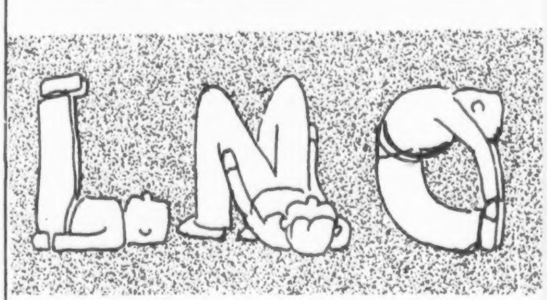
These can also be made from the stick figures to determine the actions they will take. Makes an otherwise boring subject of lettering forms become interesting to the children.

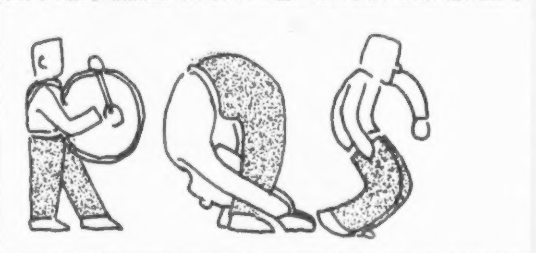
Perhaps through experimentation you can figure out some new approaches which may be shared. A sheet may be worked out using girl shapes that may show some of the actions the girls do.

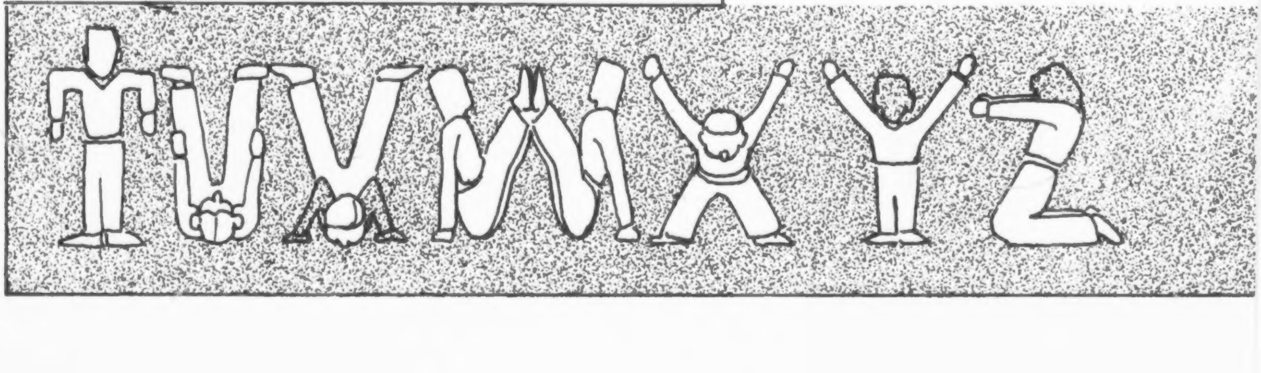
Perhaps a series may be worked out using faces instead of figures for the letter shapes. There are many other possibilities that may be tried if the motivation is approached in the correct way. Children love a challenge — give them that opportunity to experience to lead them to discoveries of their very own creations.

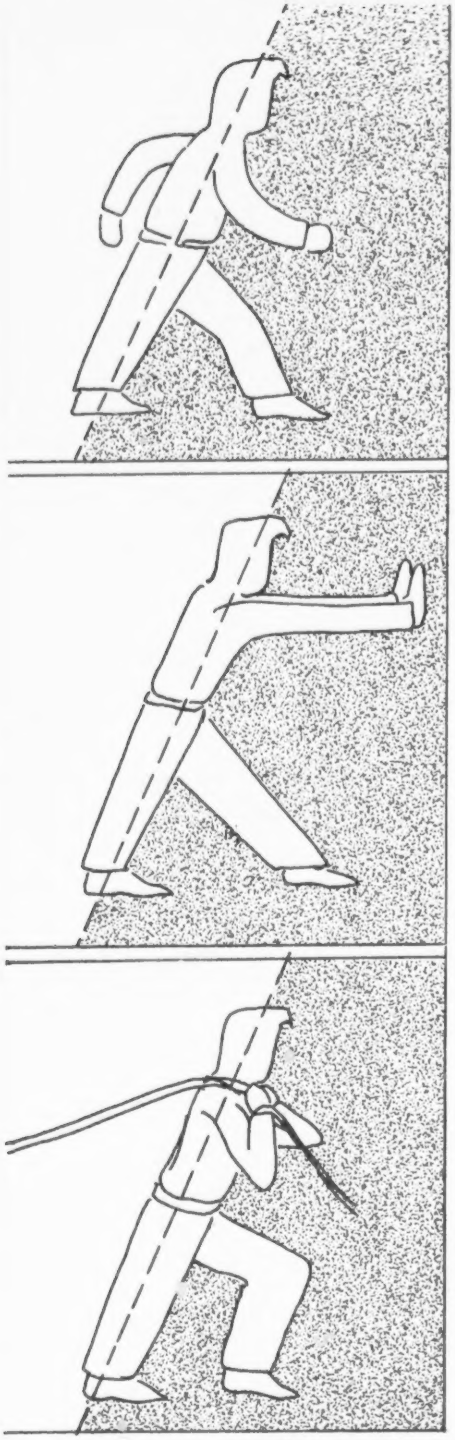












Figures Basic Action . . .

Have you ever wondered about how to make the figures show action? This sheet will help show how one basic action line, which is indicated by a dotted line, can be the basis for many figures. You will note the figures change only slightly by changing the arm or leg movement. Note the head can also be turned to create another change in the action.

The teacher might have to prepare her children with much preliminary discussion and demonstration of the basic figure actions. She may have to discuss proportion of the figure. The illustrations show the extent that one basic figure can give to show action words. Develop an action vocabulary so children can understand that these are actions they perform every day in their normal routine of living.

May we suggest some of the action words they should try to illustrate:

run
sit
hop
eat
dig
mop
lie

walk
push
pull
lift
jump
kick
yawn

trip
fall
rake
wash
pray
skip
swim

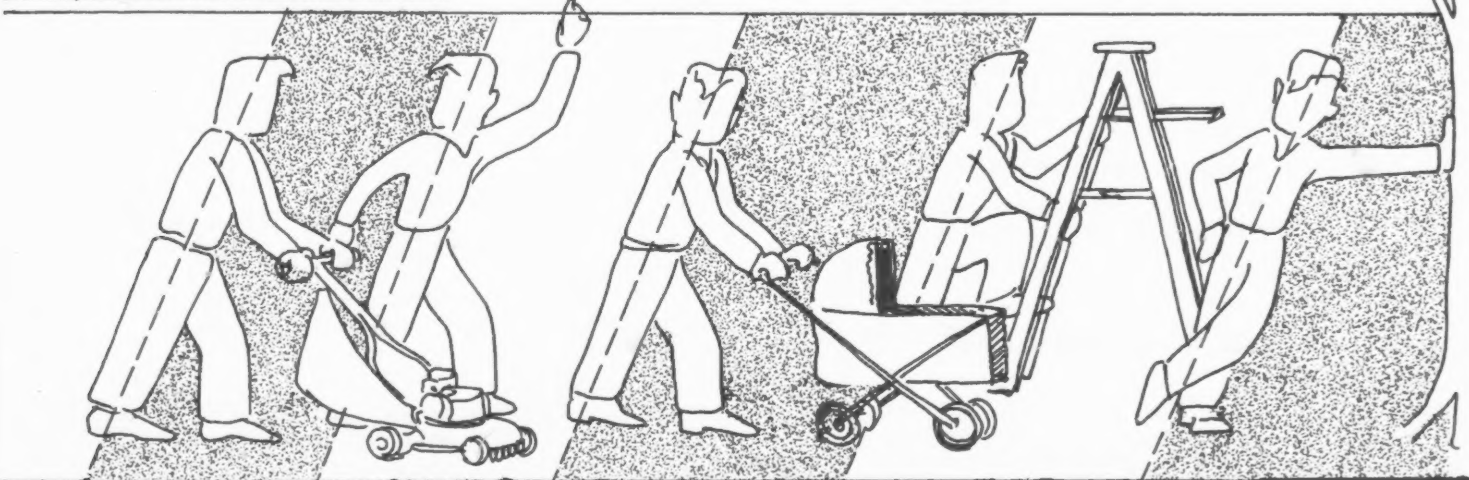
climb
swing
carry
crawl
kneel
brush
study

stand
skate
dance
throw
catch
dress
slide

sweeps
vacuum
shovel
pickup
bounce
creeps
builds

Think of the exercises and gymnastic acrobatics that can be added. Your list will grow. Take the children through a basic routine day of activity from yawning, rising, dressing, eating, going to school, etc.

The list is essential before illustrating action figures. We recommend collection of action of all types from newspapers, magazines and other sources. Train a child to observe others in their play, work, sport, and other activity. Much practice is required. Watch the children develop, do not expect perfect action at first. Praise whenever possible, encourage them often.



Basic Figure Drawing...

A simple approach to figure drawing or painting that appeals to children usually will begin with stories. The ginger bread man is the simplest to do. Note the bear is a natural outgrowth of the first figure. The details follow normally. If children leave out these parts in their pictures such as noses, ears, mouth, a reminder using a sentence which includes the sensual need for these details will bring them out.

Have the children make a scarecrow which can be very imaginative. In fact, anything they do will be correct.

The child will now be ready for human figure drawing. Note the illustrations at right showing the development.

To make the figures large have the children bump the edges of the paper. This can be accomplished by folding the paper into four pieces and dividing as shown. Note the proportions, for the very young, one need not go into too much detail to satisfy their questions.

Note the seven cut to make a costume. A fringed cut is made after the paper is opened up. A head is added to make the figure. Hands and feet may also be added if desired.

When children ask how, try to keep your answer simple just to satisfy their inquiry. They don't need too much detail.

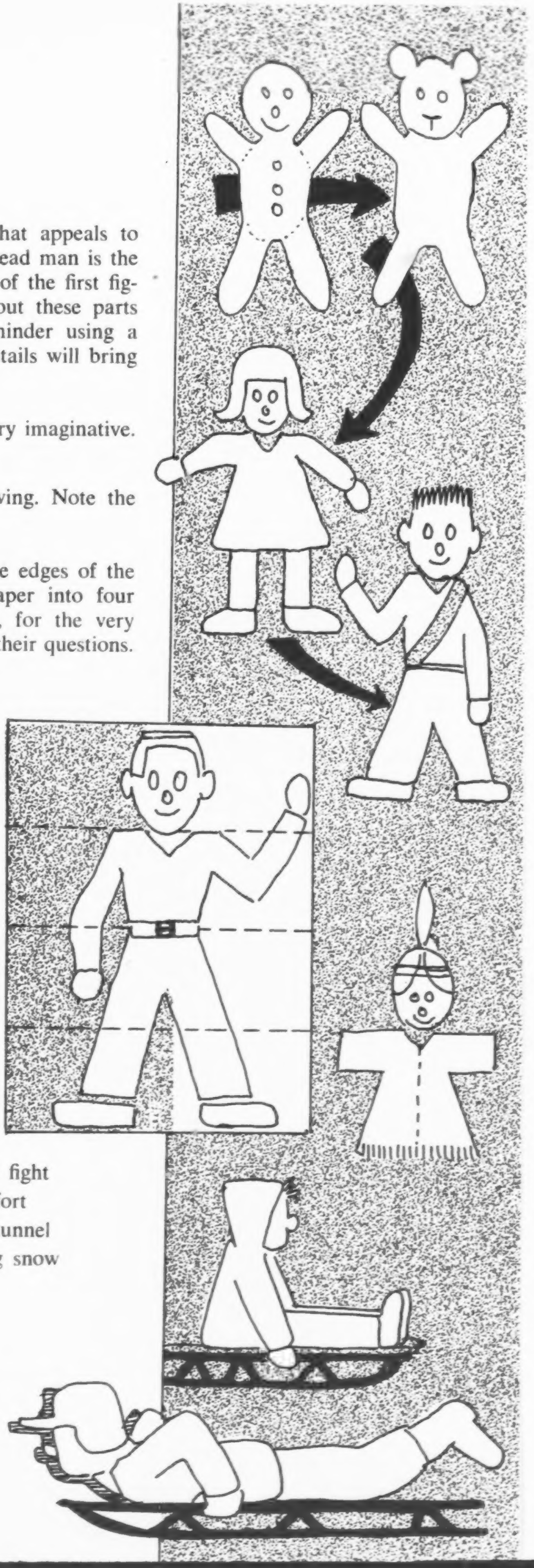
Winter fun activity leads to positions of figures showing action.

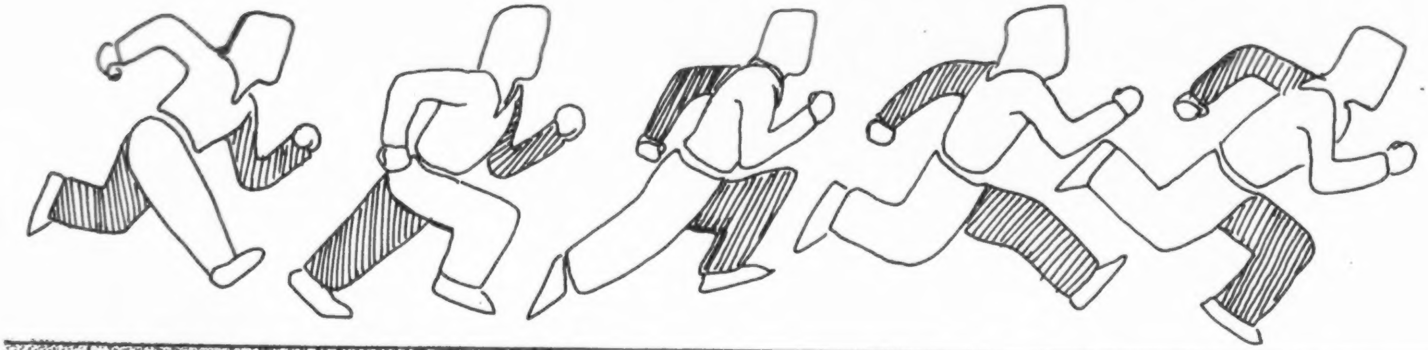
It is a simple matter to make a skater from the figure on the sled by placing a leg under the body in this position. The leg needs to be slightly bent. Try to place this leg about mid-point near the hip.

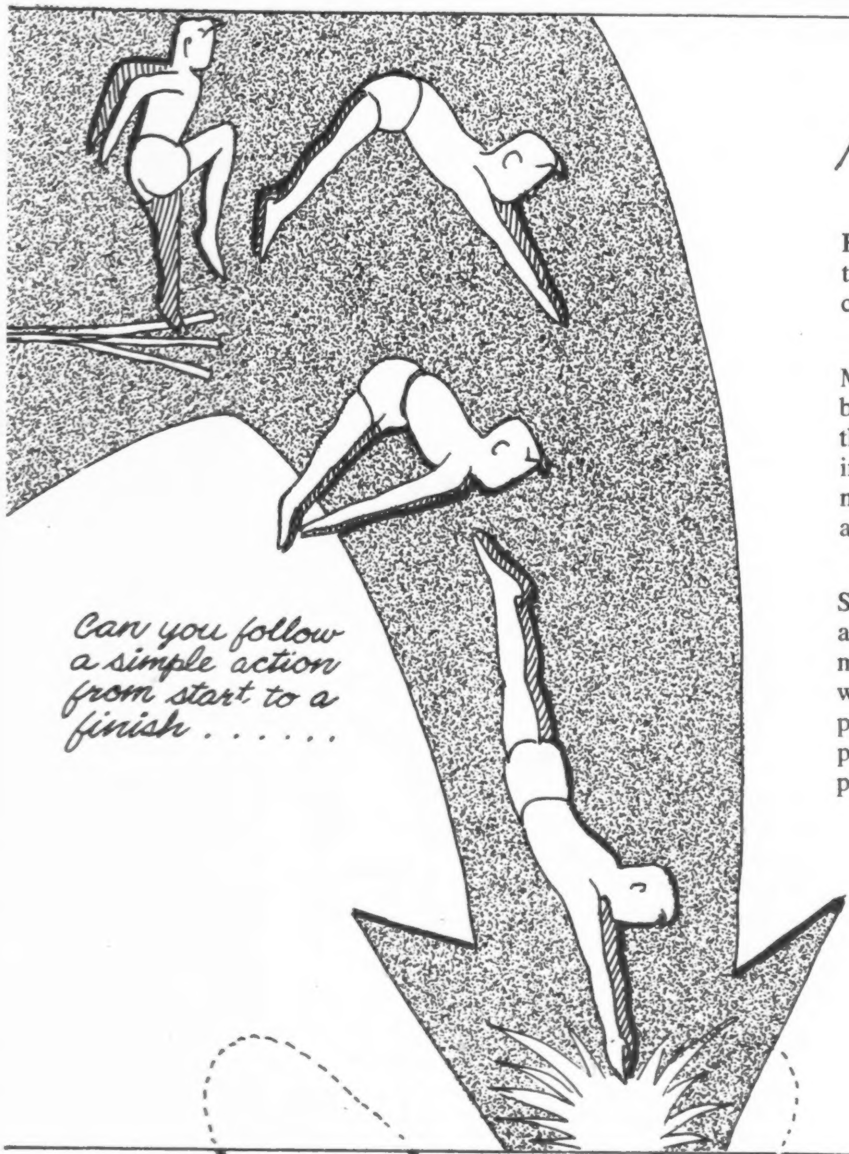
Additional figure suggestions for winter fun sports:

Climb up a hill
Roll a snowball
Push a snowball
Lift a snowball
Skating on ice
Falling on ice
Put on skates
Ski down hill
Snowball fight
Build a fort
Build a tunnel
Shoveling snow

These and many more can be done in a simple way. Study different kinds of winter clothes. Headgear, scarves, boots, and snowsuits.






Can you follow a simple action from start to a finish ......

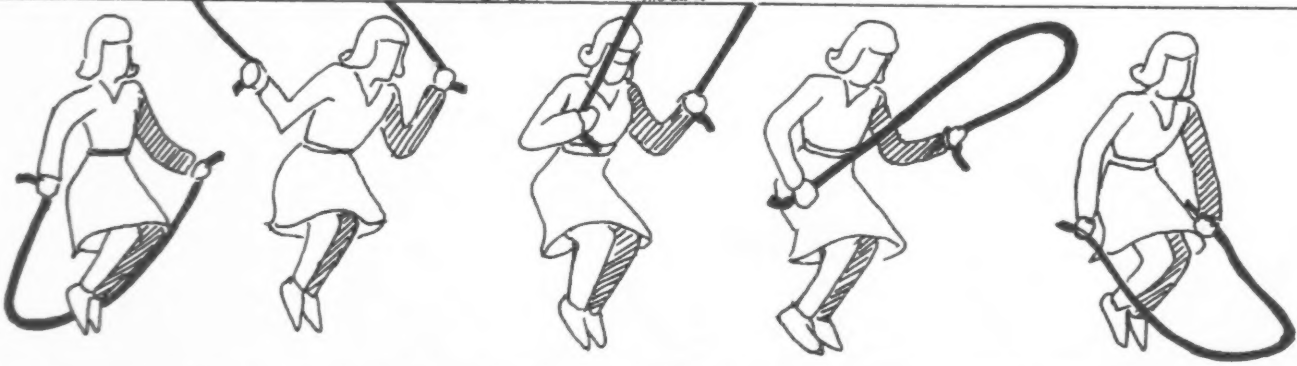
Motion Studies...

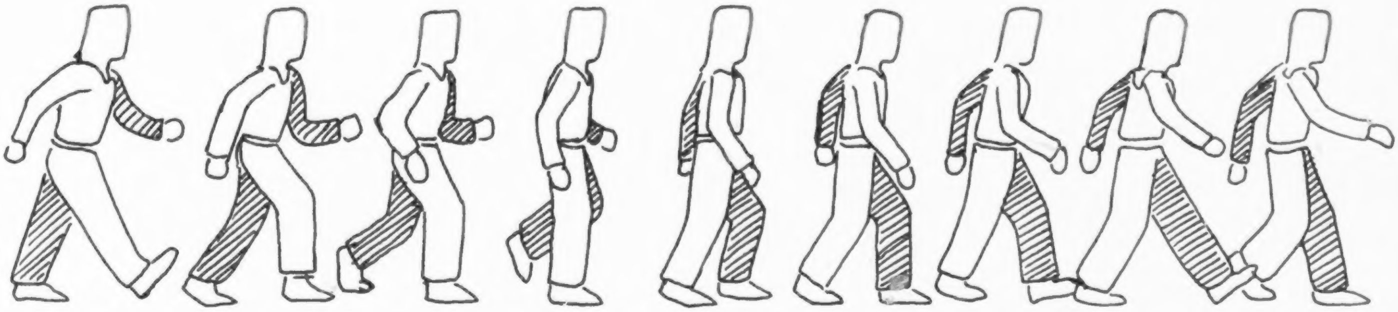
For more action we show various positions for running. Children can be challenged to figure out many others.

Much thought needs to be put into the beginning and finishing movements of the body. Bouncing a ball, leaping into the air, a dive as illustrated, gymnastics, boxing, wrestling, dancing, and the usual active sports.

Study of the main body position and add the arm and leg changes as they might take place. Flip picture books with a different figure drawn on each page, when flipped quickly will give pupil a sensation of movement. Motion pictures in a very simple style.

The pictures may appear a little jerky and the student may have to figure a way to smooth out the actions by further study.





Figures in Action . . .

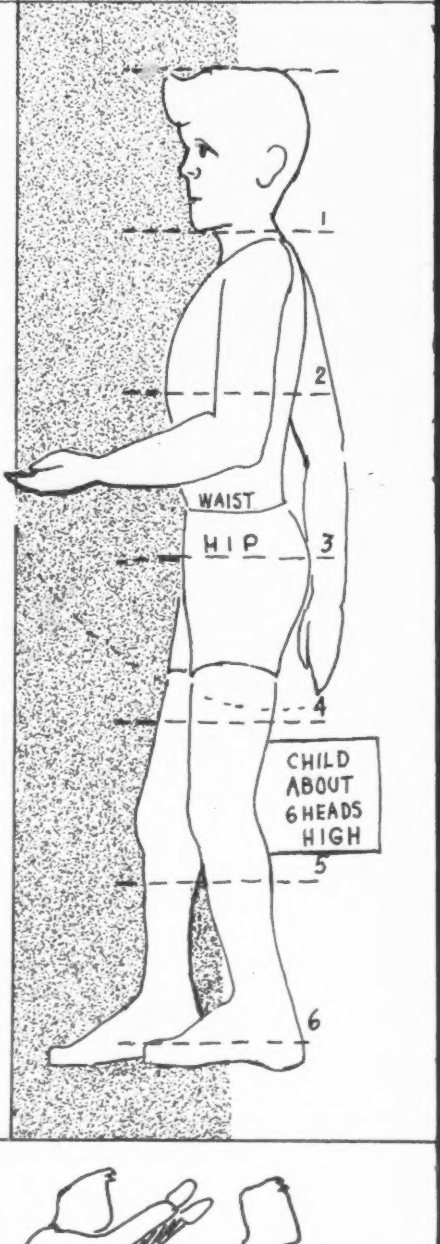
Have you ever wondered what happens when a person is to take one step? The illustration above shows some of the movement necessary to accomplish this. Notice how the light leg moves back and the dark one moves forward. While this is taking place, note the arm action. Opposite arm and leg move in unison.

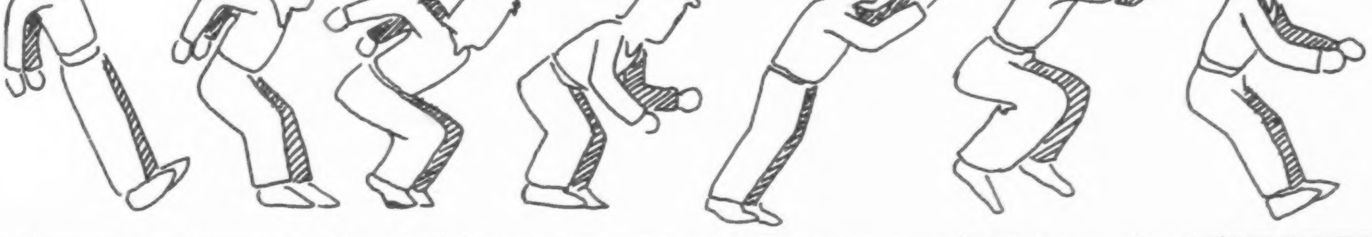
This is the principle used in cartooning for movies. One needs to think through all the basic moves that are necessary for any movement of the person's body.

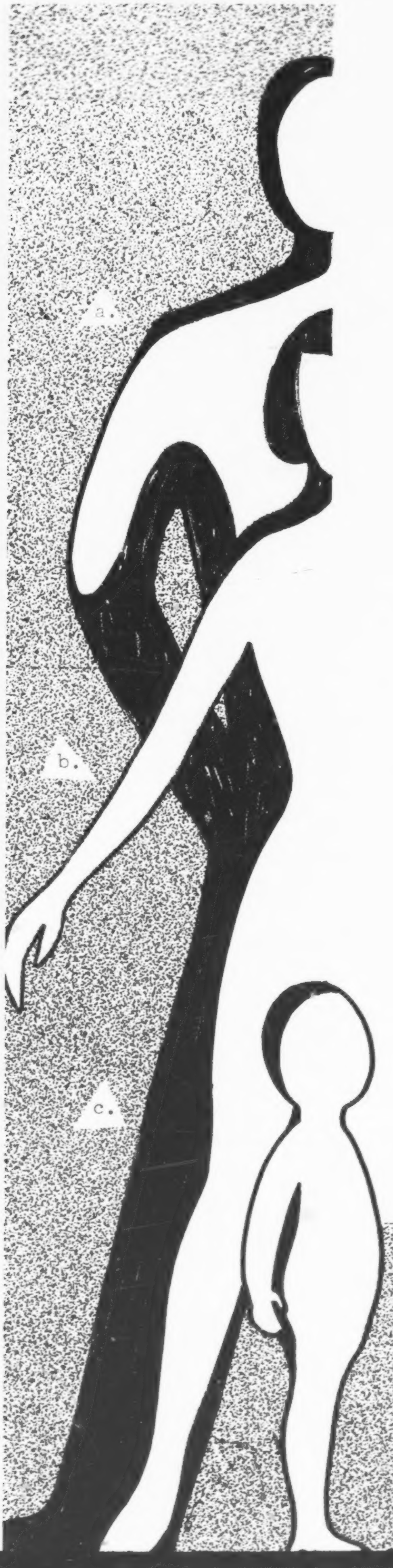
The illustration below shows some of the action that is involved in making a jump with both feet. In this action both arms and legs are moving together. Other actions will vary depending on what you wish to have the person do. Try to have the children walk or move in slow motion, concentrate on the leg movement first. Repeat identical movement, concentrate on arm action.

The most difficult to demonstrate would be rapid action. It would be hard to run slowly. Body exercises and sports activities give us many actions to watch. Bounce a ball, swing a bat, throw and kick a ball, a dive, swimming, sliding, climbing, hopping, bowling, golfing, and many others. Work chores around the home are another source of action movements. Games children play give us additional ones. Try collections of sports, games, play, work figures, these will assist pupils in understanding body movements and aid them in drawing these figures for any illustrations.

PAGE 48 2D LEFT POCKET







Figures . . .

The human figure is one of the most challenging subjects in the whole field of art. Generally speaking, there are basic shapes which seem to apply to people.

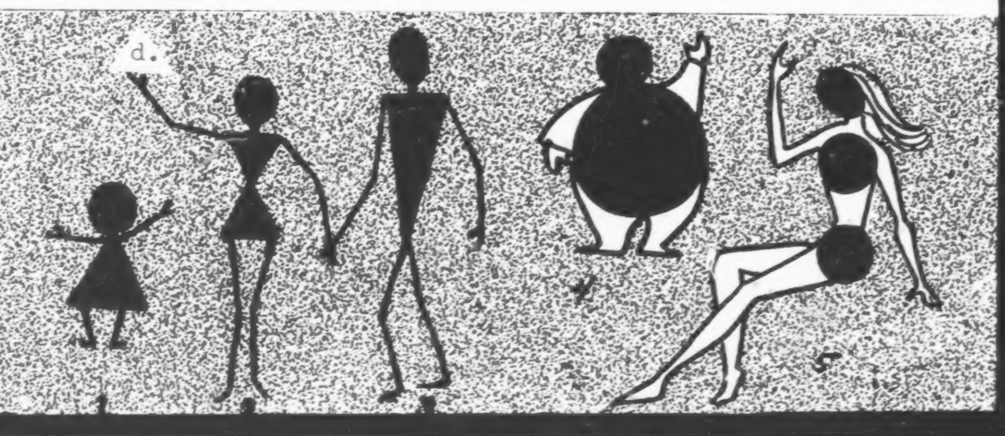
a. Shows a male figure which is usually taller than a female. Note the broad shoulders and narrow hips and heavier arms and legs.

b. Shows a female figure with a typical hourglass shape — full chest and hips connected by a small waist. Shoulders are narrow and hips are full with slender, graceful arms and legs.

c. The young child is only about four heads high. Neck and chest are small with stomach well developed. Children can be drawn with many curves to show physical fluid quality.

d. Geometric shapes apply to humans.

   1. A small child is a circle and a triangle.
   2. A woman is a circle with double inverted triangles.
   3. A man is a long inverted isosceles triangle.
   4. A fat man is represented by two circles.
   5. A woman can be three circles.



Figures Continued . . .

Although there are basic proportions to learn concerning average measurements, keep in mind that all people are different. There are short people and tall ones, fat and skinny ones, muscular and flabby ones, young and old, stooped and straight, etcetera.

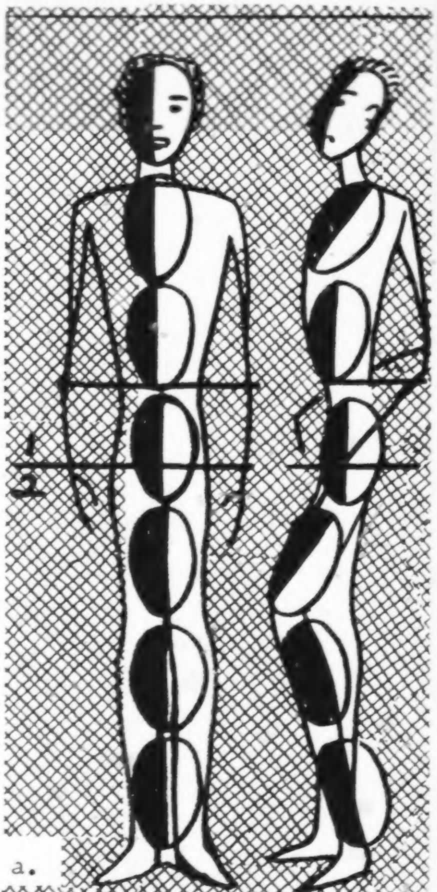
The unit of measure for a figure is the head, used as the inch is used in a ruler. The average adult form is about seven heads high.

a. Note that the hips are half-way. There are 3½ heads above and 3½ heads below the hip line. Also notice the elbows are opposite the waist. Use this chart to help gain an understanding of the human body.

b. The same general proportions prevail for women as for men. Keep in mind the basic geometric shapes and vary the width accordingly.

c. Whenever a change of position takes place, the body still has its same height of seven heads. Practice various poses and draw from life whenever possible.

d. The running oval is a good exercise in developing freedom of movement without the stiffness of stick figures.



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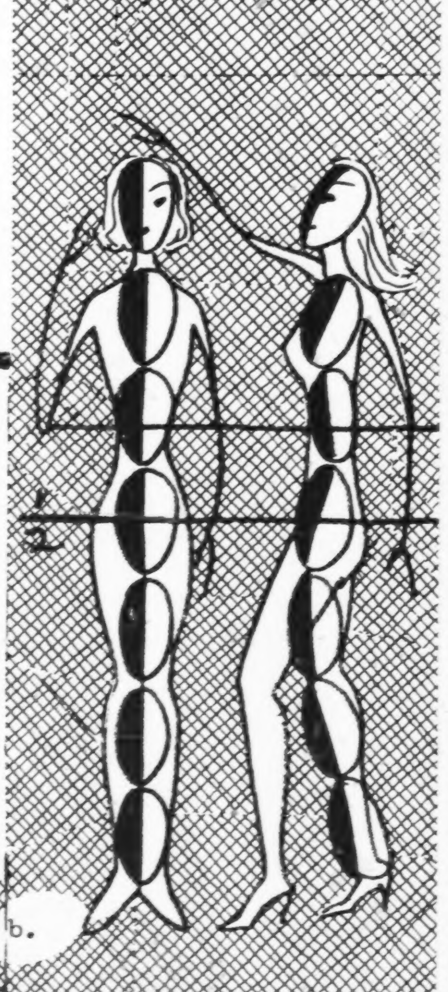

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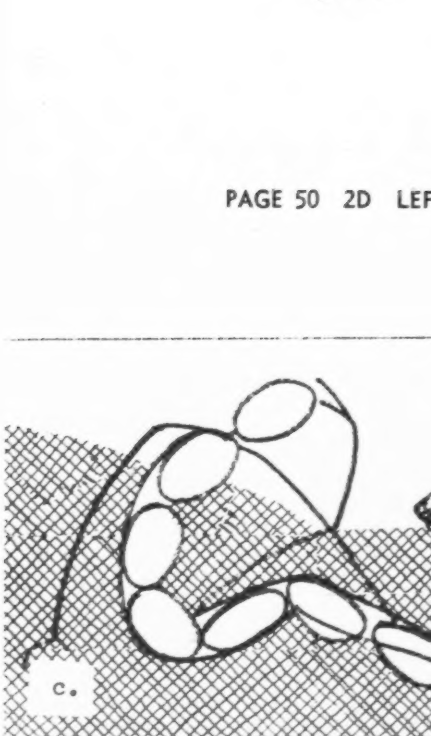

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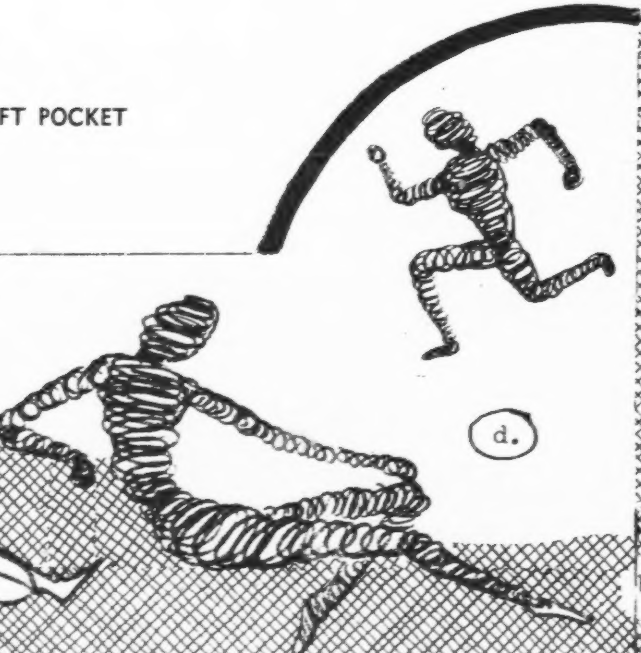

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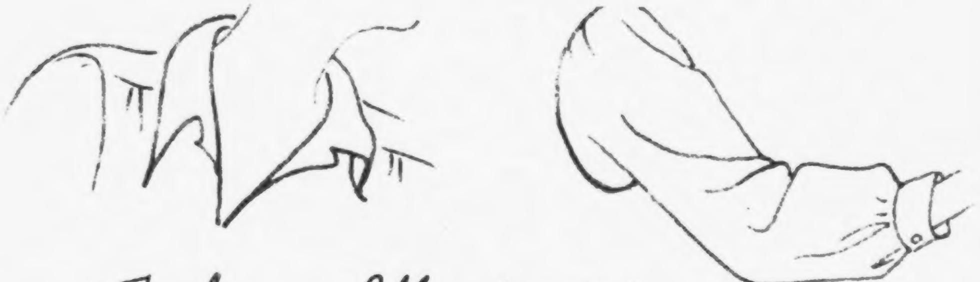


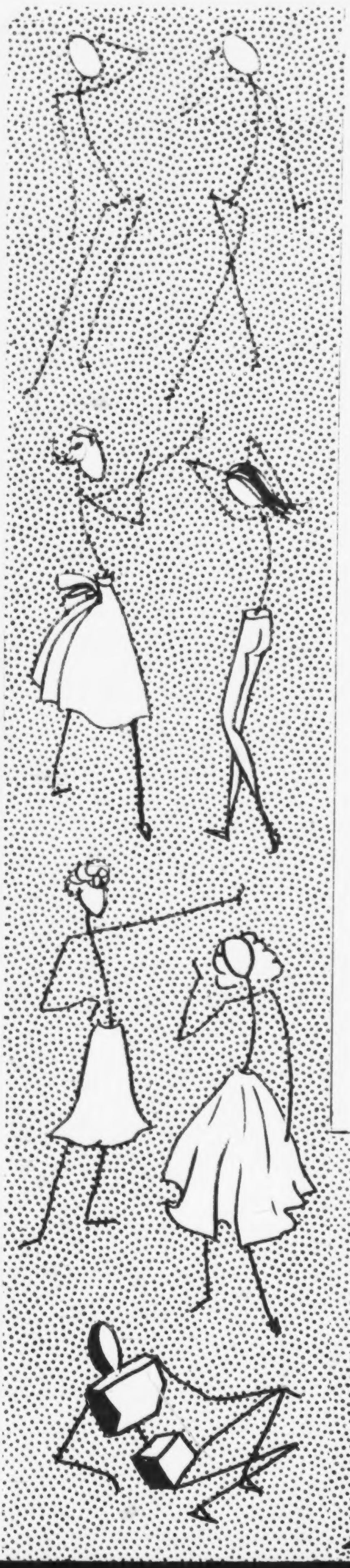
Fashion Illustration...

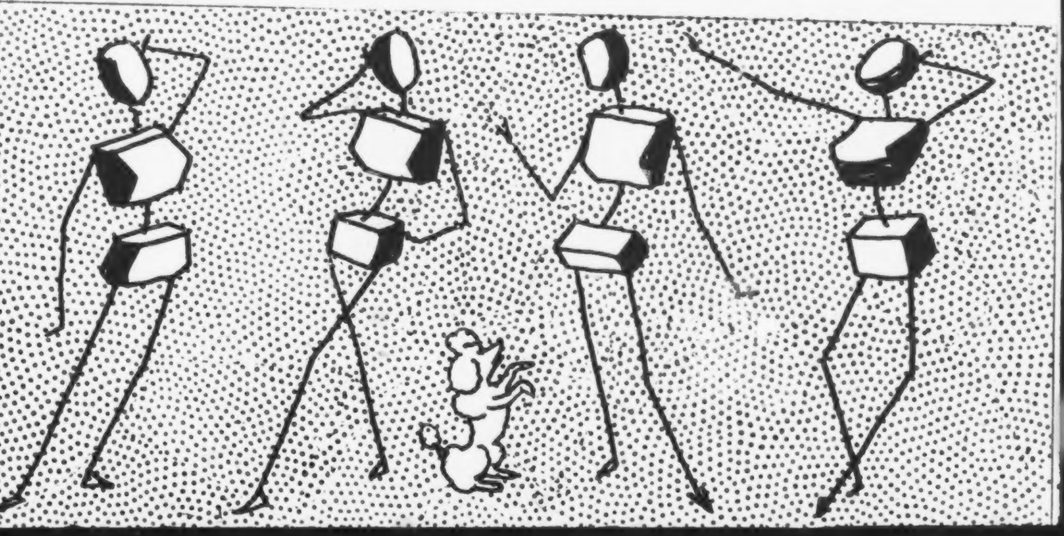
The first important step to fashion drawing is sketching the human figure. Pages and pages of sketches should be made. It is best to do this directly from a model. However, if necessary, sketching may be made up from simple stick figures like the illustrations on this page.

Literally, hundreds of figure studies should be done until easy graceful poses become natural. Try the 3D box figures as a beginning toward form in the figure. Then practice draping with various kinds of clothing. Notice how a sleeve wrinkles, how a collar goes around the neck, etc.

Make a study of costume design from various ages of history as a preliminary to the "fun" part of designing the latest styles. No one can create out of a vacuum and all current styles have their historical counterparts. Even the daring "topless" craze is old, dating from ancient Egypt and Crete. Did you know the Romans were first to wear a bikini at Pompeii?

By exposing the students to good costumes through the ages, many more ideas will be adaptable to our own styles. A good course in fashion design can be a study of the social sciences as well.





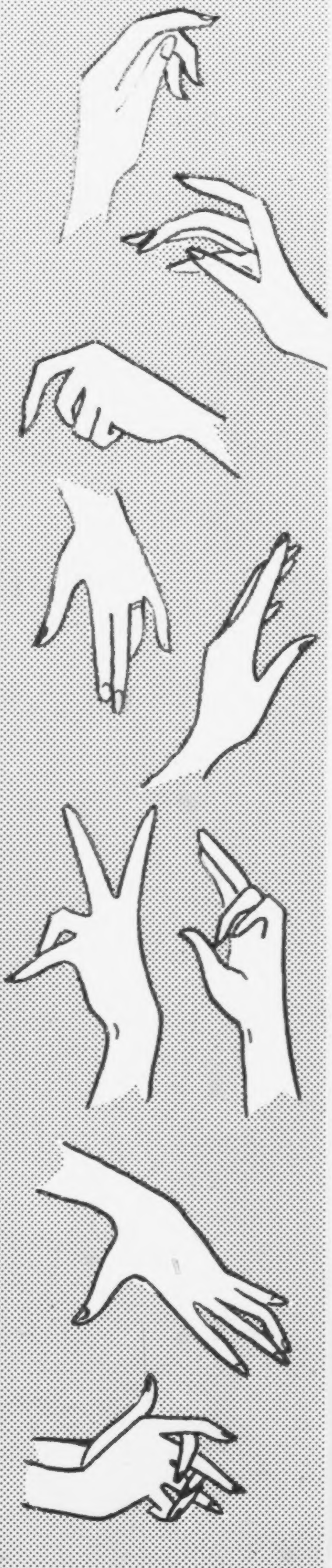
Fashion Continued...

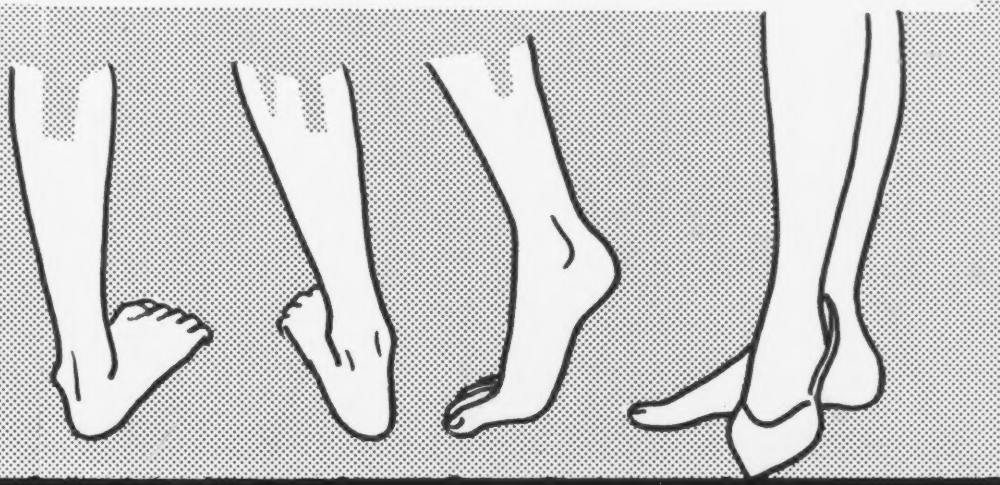
For students anxious to progress fast, tracing paper should be placed over magazine and newspaper fashion photographs and countless tracings should be made to get the feeling of fashion drawing. Tracings of difficult to draw areas of the body such as feet and hands should be made until some familiarity is established. Facial features should be studied thoroughly.

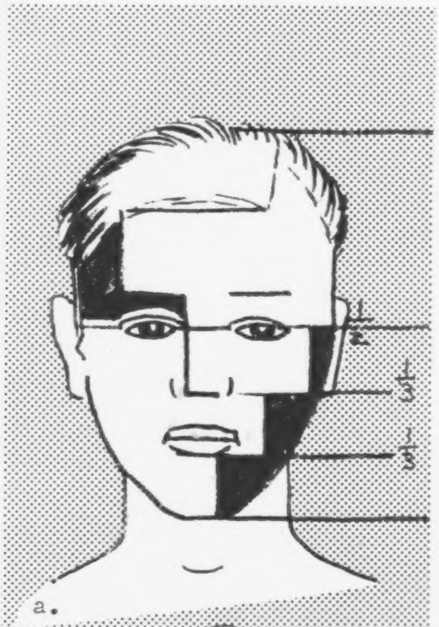
Tracing paper should be discarded as soon as possible since this is merely a "crutch" for getting started. Students who progress past this point will try for structure, a good proportion and the necessary charm and grace which characterize good fashion illustration.

Make careful studies of textiles and the way materials drape. Only after much work does fashion illustration become easy to do.

Make a thorough study of the techniques of top fashion illustrators. A notebook can hold a collection of pictures which should be done in such a definite style that the work of an artist is recognizable even without a signature. This is the purpose after all — to develop an individual technique of doing fashion illustration and an individual way of designing clothes.







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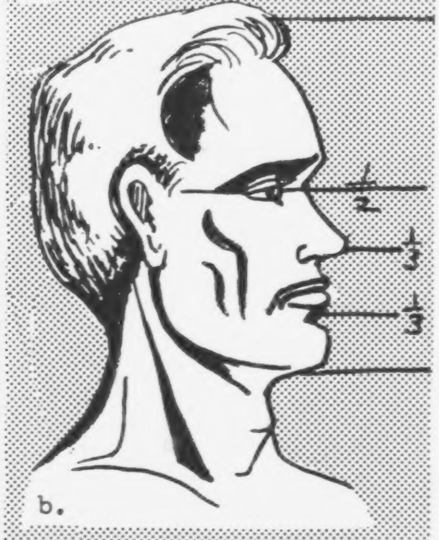

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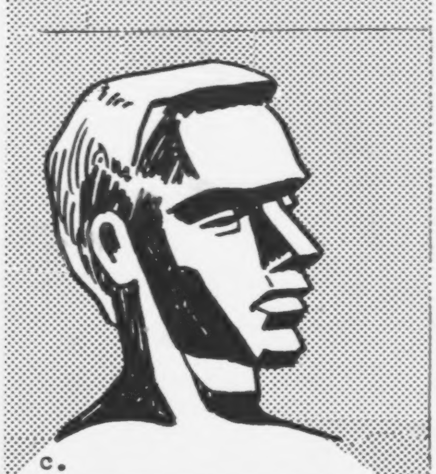


c.

Portraits....

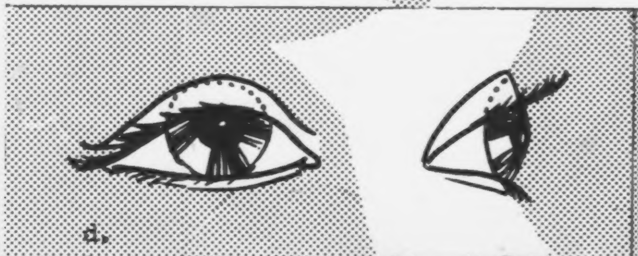
a. Begin with an oval shape. Horizontally divide the oval in half. This is the location of the eyes. It is important to get the eyes accurately placed for good proportion. The chart is self-explanatory. Follow it for good results, keeping in mind that these are average measurements and that people vary.

b. A profile head has the same general measurements as a front view. Practice the sideview using Chart B for a guide. Students enjoy drawing themselves, their teacher, their classmates, and their family after they have mastered the basic proportions of the head.

c. A head is a three-dimensional object. In art a surface is called a "plane." Notice that a head is like a flight of stairs — planes advance and recede. The advancing planes catch highlights while the receding planes are in shadow.

d. An eye does show the whole round pupil, but never shows the complete circle of the iris except in cases of extreme surprise, fright, or shock. Use the eyelid to soften the stare that children's art work often has. From the side, an eye is only half visible. Practice drawing eyes in different positions: looking up, down, and sideways, open and shut.

e. A mouth is generally shaped as in sketch f., but again all people are different and mouths vary greatly. Usually the lower lip is fuller and catches the light. The top lip is actually a receding plane. (See sketch c.) Practice sideviews, and try all positions.



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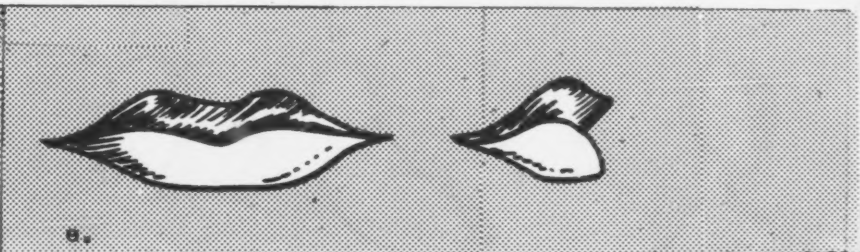


e.

Portraits Continued...

a. Babies and small children do not have the same eye measurements as adults. Instead of ½ way, the baby's eyes are ⅔ of the way down the head. Notice how this makes the face look young. Features are small and dainty.

b. Older people have loose skin with wrinkles. Their eyes have drooped lids, bushier brows, sparser hair, saggy chins, and thinner mouths than middle-aged adults.

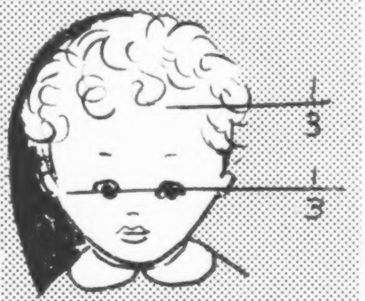
c. Expression on a face is a matter of changing line direction in the facial features. Notice how in this sketch a disagreeable look results from frowning eyebrows and forehead wrinkles coupled with a tightened mouth turned down at the corners.

d. An expression of joy is the opposite of sketch c. Note the raised eyebrows, twinkling eyes, upturned mouth. Let students experiment with various expressions such as sorrow, fright, anger, surprise.

e. A distortion of the face results in caricature studies which is another portrait lesson bordering on the cartoon style. Clowns are wonderful subject matters and students can be very creative.

f. How the neck indicates differences:

1. A long straight neck gives good posture.
2. A bent-over shoulder shows age.
3. A baby has very little neck development.
4. A thick neck shows muscular structure.
5. A feminine grace results from a curved neck.



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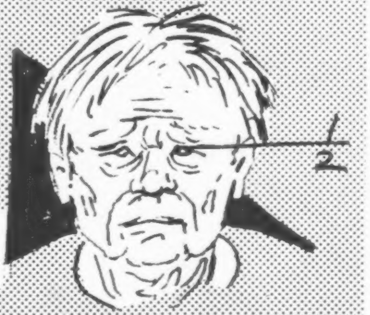

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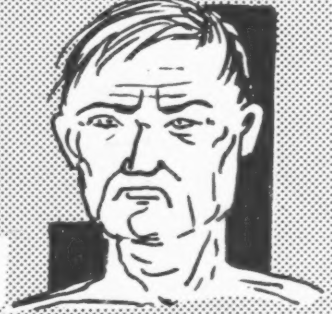

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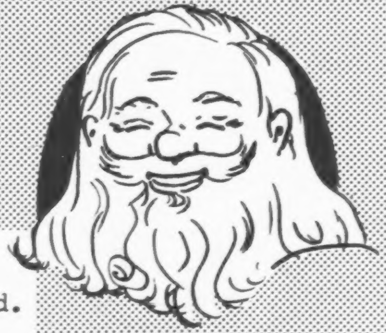

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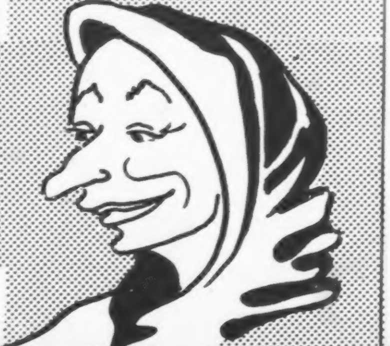

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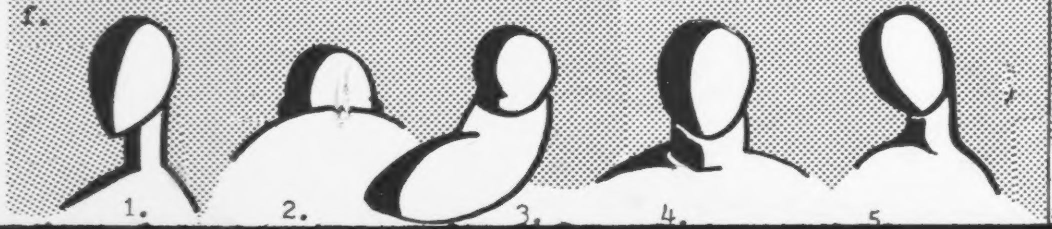
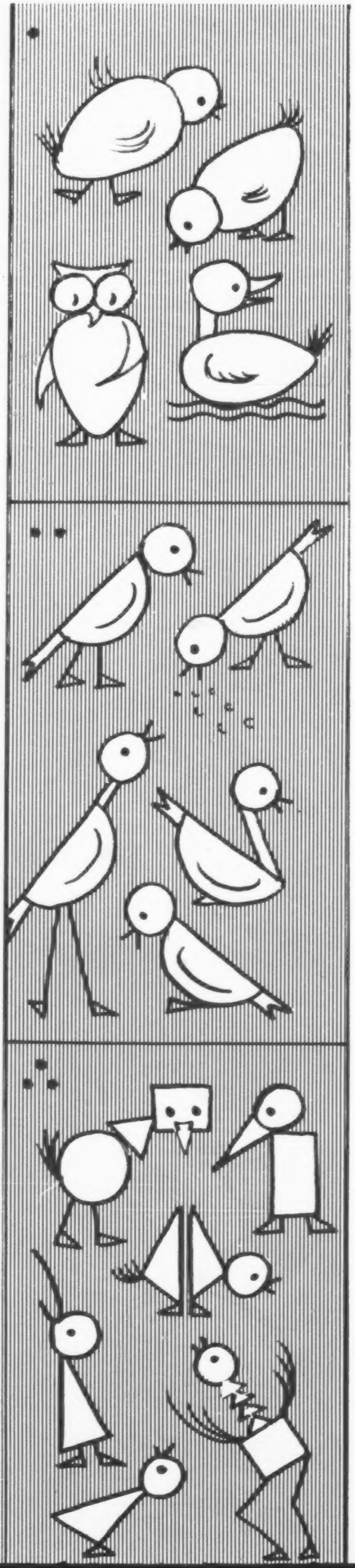
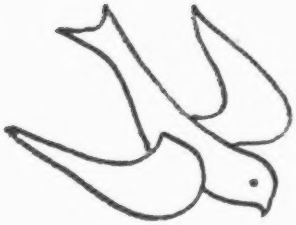






Birds . . .

CIRCLE AND EGG SHAPES FOR BIRDS

1. Use a circle for the head and an oval for the body.
2. An oval can be used to include both the head and body.
3. Try drawing realistic birds.
4. Add eyes, beaks, wings, legs, tails and feet.

STICK AND CIRCLE BIRDS

1. Use a circle for the head.
2. A half circle or curved line for the body.
3. Add stick legs and use triangles for the feet.
4. Add eyes, beak, wings and detail.
5. Try for different positions: some stretching, some bending, some sitting, some standing.
6. See how many birds children can group and overlap.

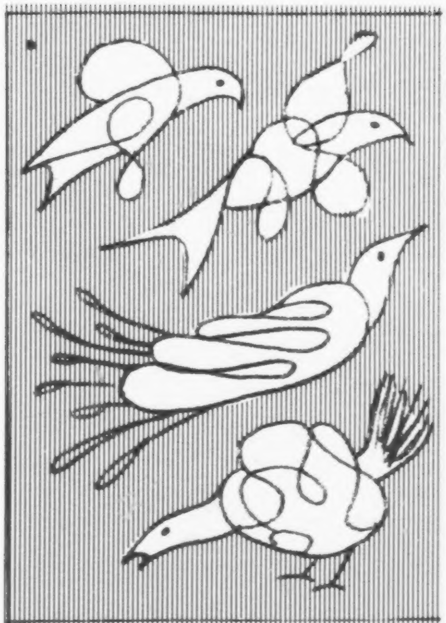
BASIC SHAPES FOR BIRDS

1. Cut out basic shapes from colorful construction paper.
2. Arrange the basic shapes on colorful background to make interesting birds.
3. With dark crayons add eyes, beaks, wings, stick legs and detail feathers.

Birds Continued . . .

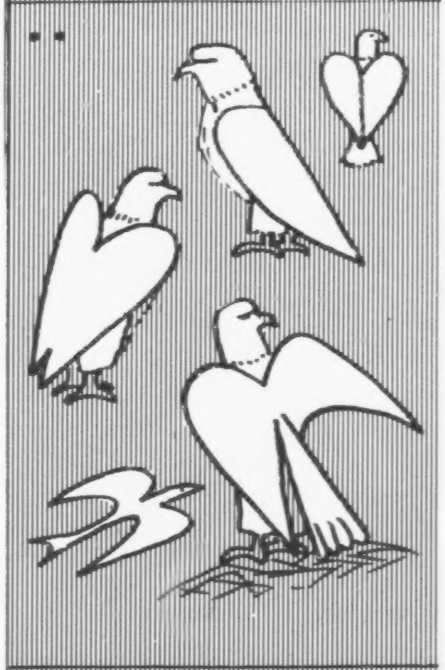
SCRIBBLE BIRDS

1. Draw a simple scribble.
2. Add legs, beak, feathers, eyes, etc.
3. Color with crayons to make an abstract bird and accent with black crayon.



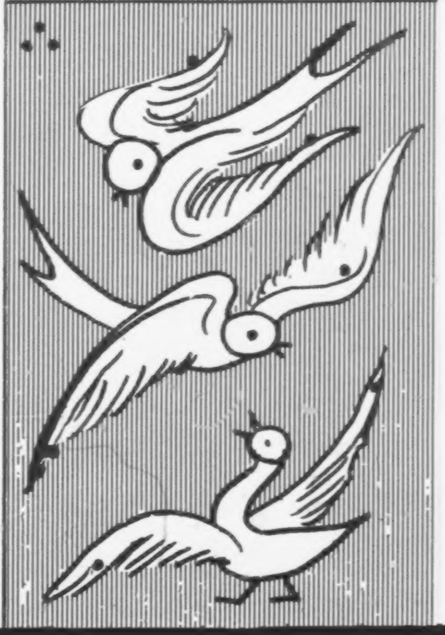
HEART SHAPED BIRDS

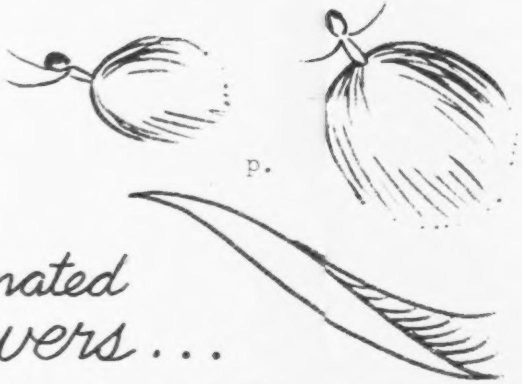
1. Eagles and hawks can easily be formed by using a heart shape.
2. Try turning the heart shape at an angle for different positions.
3. Split the heart in half to make wings spread. Feel free to deviate from this shape to encourage naturalness.
4. Birds of prey are good antidotes for song birds. Children love variety. Let them try several birds in one picture. Strive for distance by making some large, some medium, and some small.



DOTS FOR FLYING BIRDS

1. Place three dots at random on the paper.
2. Place a triangle around one dot for the head.
3. Add neck and then wings to the dots closest to the head, bend joints.
4. Add body and tail (legs do not show).





Animated Flowers . . .

Children love to imagine that flowers have faces and personalities. Let them try drawing all those in different arrangements and positions. Group for bouquets. Use your own imagination to motivate the class!

a. Sunflower — Large head with small petals

b. Daisy — Small head with large petals

c. Pussywillow — Diagonal stalk with oval and circle cats

d. Violet — Notice curved stem from top — eyelids

e. Tiger Lily — Two larger spots for eyes, open mouth

f. Dandelion — King of the weeds — sharp leaf

g. Pansy — Five ruffly petals — curved stem

h. Poppy — Oriental face — black markings

i. Jack in the Pulpit — Sheltered orator

j. Iris — A baby wrapped in lavender blanket

k. Lily of the Valley — Dainty caps with curved stem

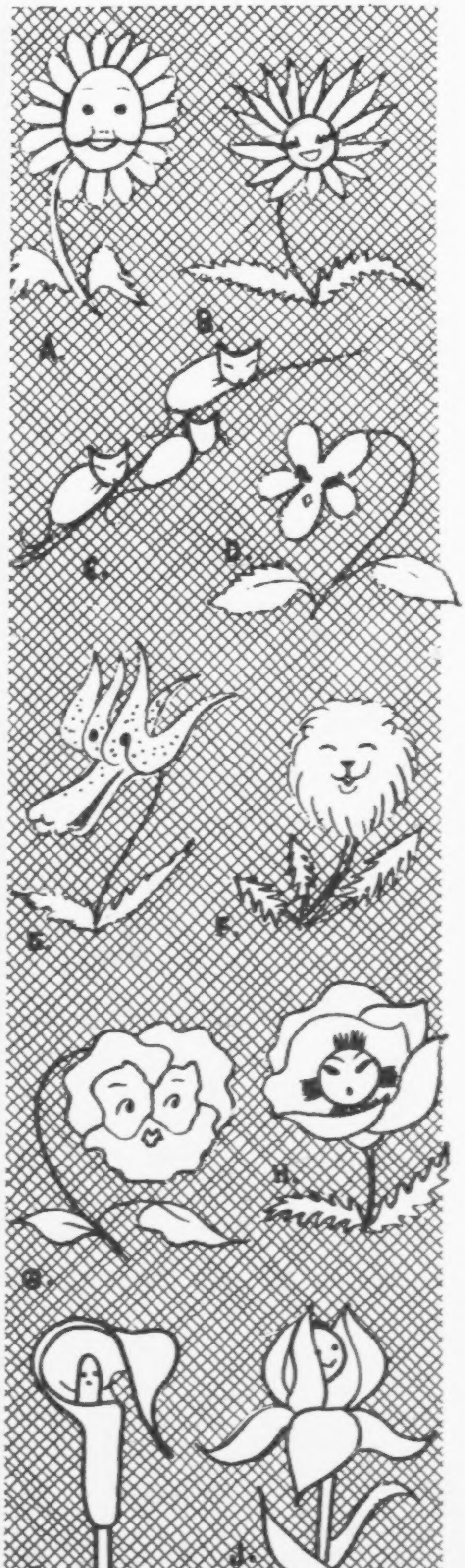
l. Snap Dragon — Soft toothless — curvy & harmless

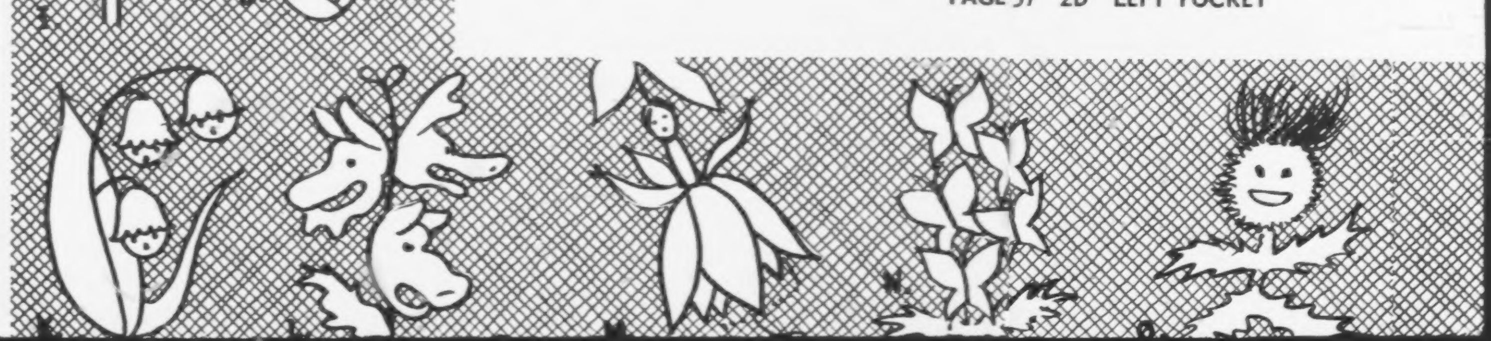
m. Fuschia — Graceful hanging blooms

n. Butterfly Weed — A cluster of wing-petals

o. Thistle — Prickly with soft purple hair

p. Milk Weed — Seed fairies flying

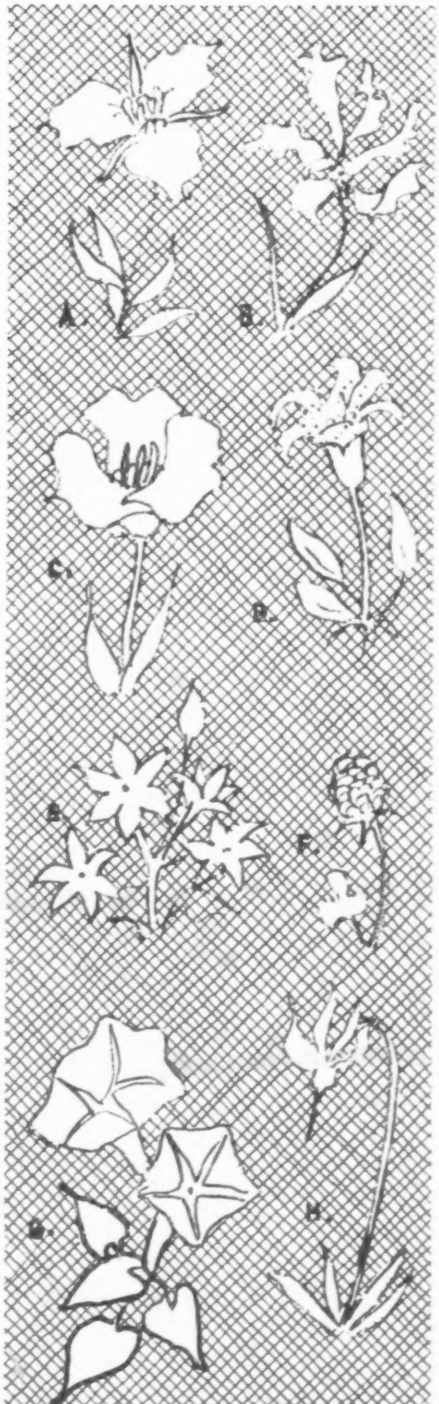


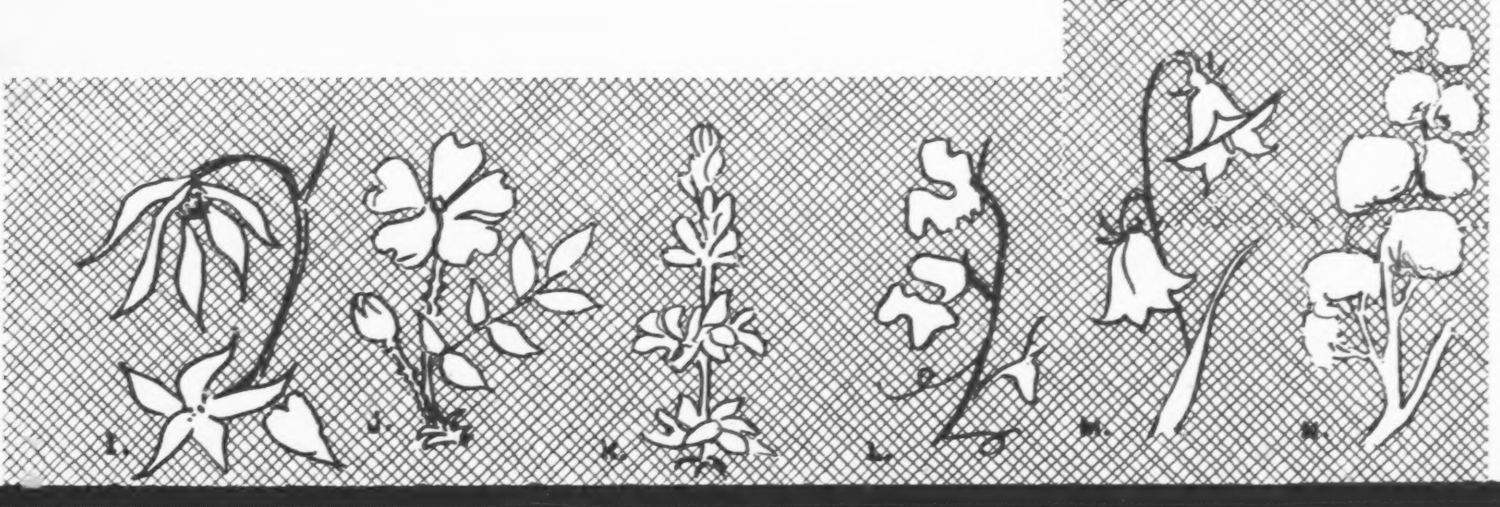


Flowers Continued...

There are many wild flowers children can draw directly from nature. Notice the variety of shapes in the petals, leaves, and stems. Encourage children to see detail of each individual blossom. If possible, have some examples in the classroom. Let the students try grouping flowers in bouquets. Try for simplicity: do not crowd in bunches.

a. Trillium
b. Wild Iris
c. Mariposa
d. Small Tiger Lily
e. Wild Onion
f. Clover
g. Morning Glory
h. Shooting Star
i. Clematis
j. Wild Rose
k. Lupine
l. Sweet Pea
m. Blue Bell
n. Snow Bush

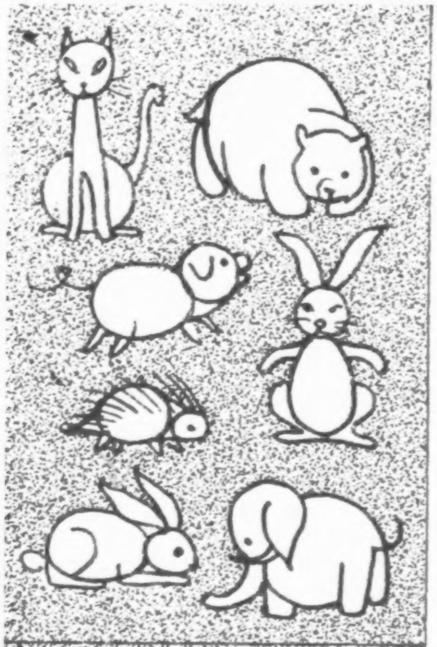




Animals . . .

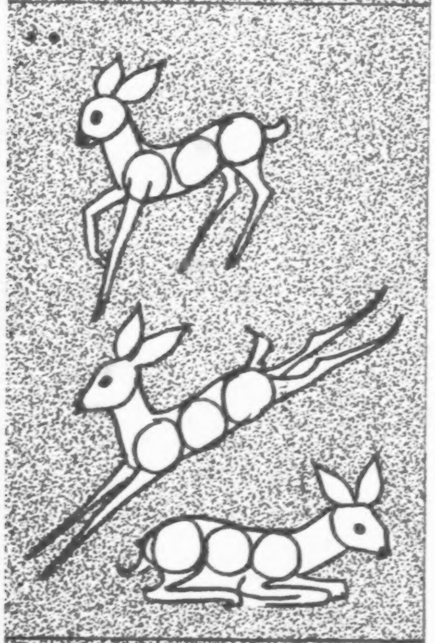
• SIMPLE TWO CIRCLE ANIMALS

1. Start with the head and the body using a circle for each.
2. Connect them with necks and add legs, feet, ears, tails and other details.
3. Add faces to heads. Try for personality.



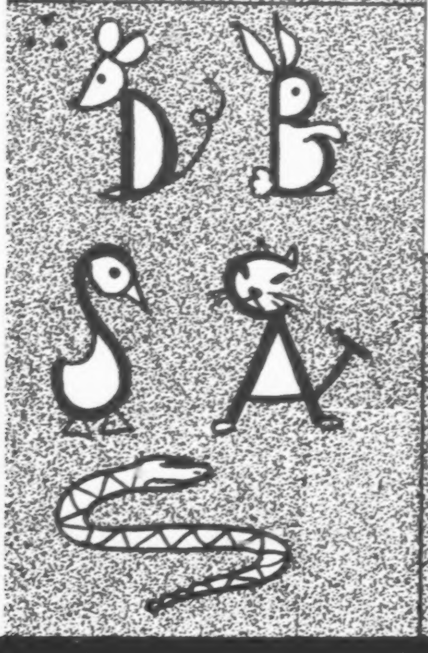
• • FOUR CIRCLE ANIMALS

1. Three circles in a row become bodies for many different types of animals.
2. A single circle for the head should be spaced far enough away to allow for neck.
3. Try for action studies — running, jumping, stretching, bending, resting, etc.
4. Group animals for practice in overlapping shapes.



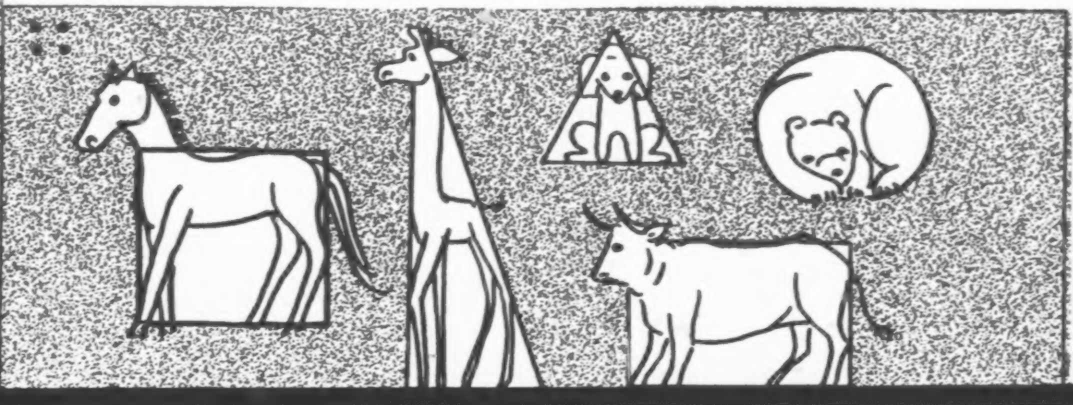
∴ ALPHABET ANTICS

1. Using letters, let the children use their imaginations and develop animals.
2. Combinations of letters may be used.



⁘ GEOMETRIC SHAPES

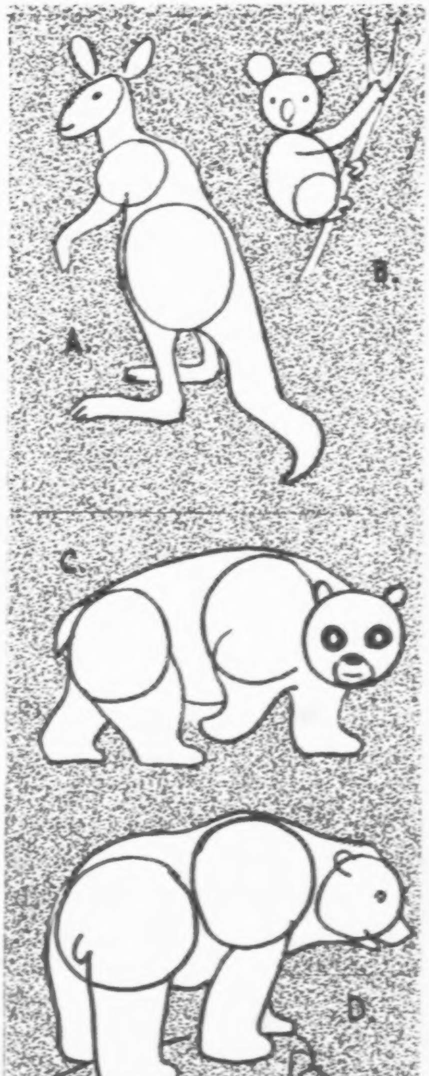
1. Try to decide what geometric shape the subjects have — start with this very lightly sketched.
2. Work within the area to bring out detail. Try several.

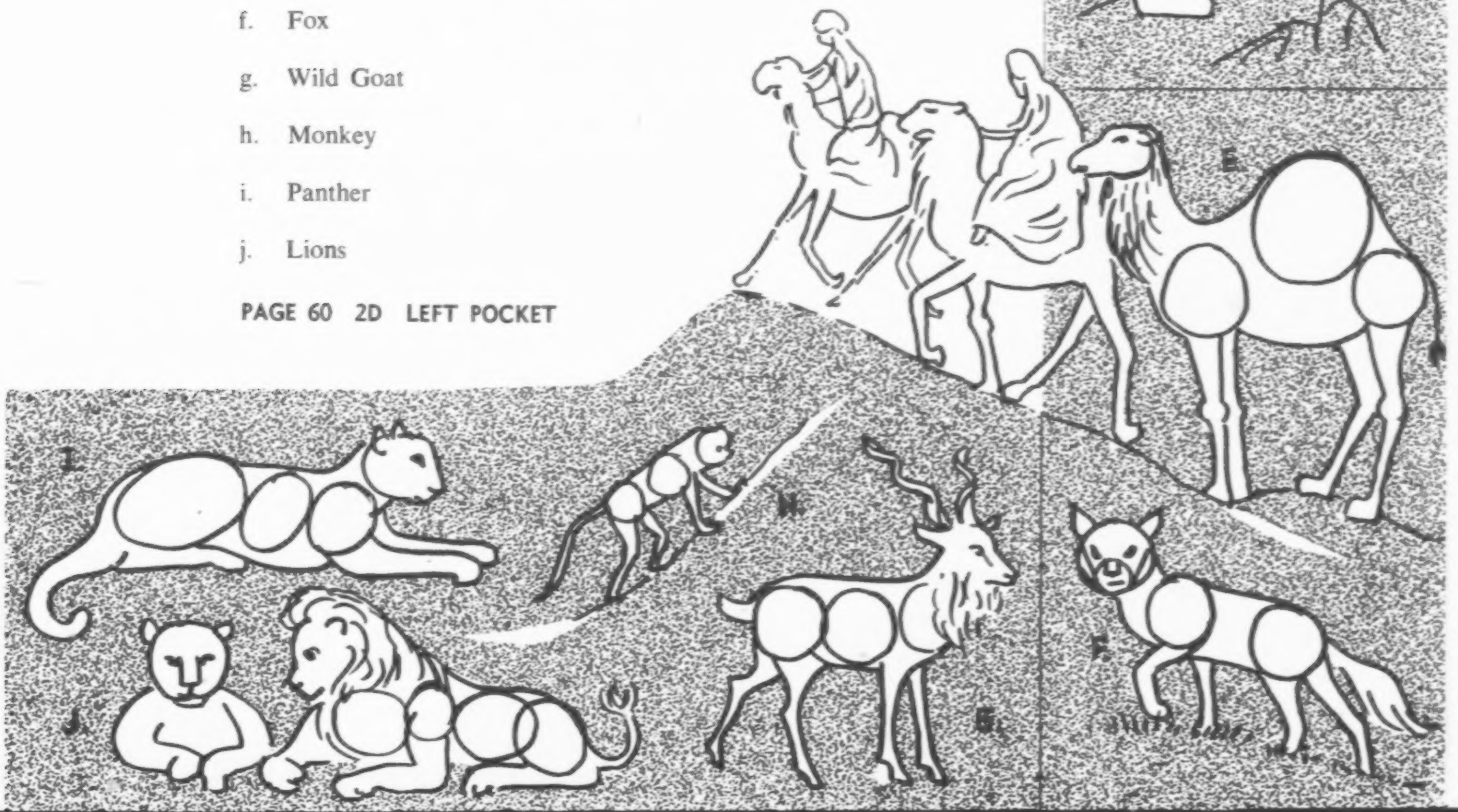


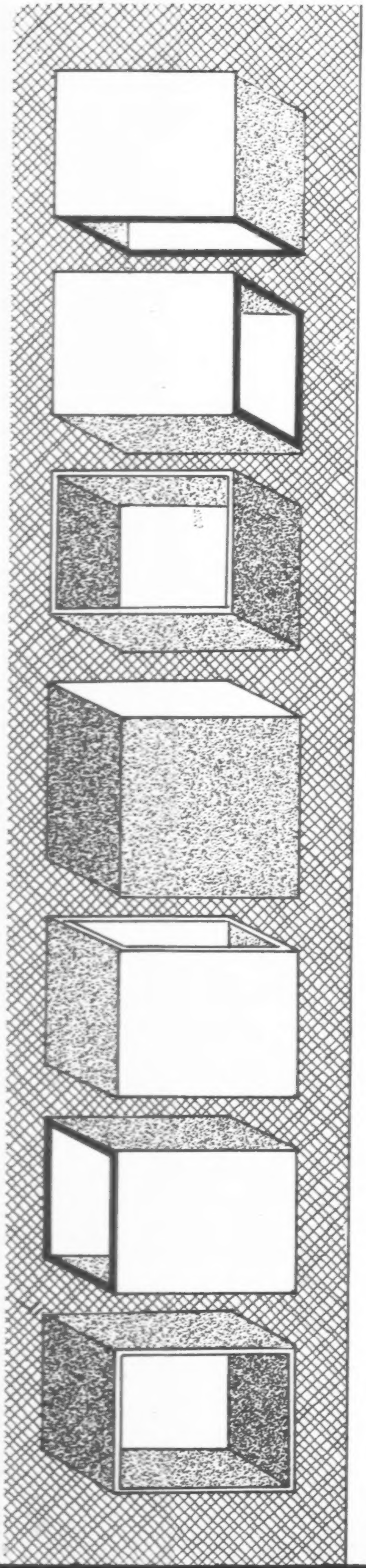
Animals Continued . . .

There are many wild animals that excite children's imaginations. Try to determine the basic shape of animal and begin with circles as guides. Draw them lightly so they can be erased when the animal is completed. Use colors, paints, pen and ink or various media to create pictures. Try to make the background fit the animals by placing them in zoos, circuses, or natural habitat.

a. Kangaroo
b. Koala
c. Panda Bear
d. Polar Bear
e. Camel
f. Fox
g. Wild Goat
h. Monkey
i. Panther
j. Lions





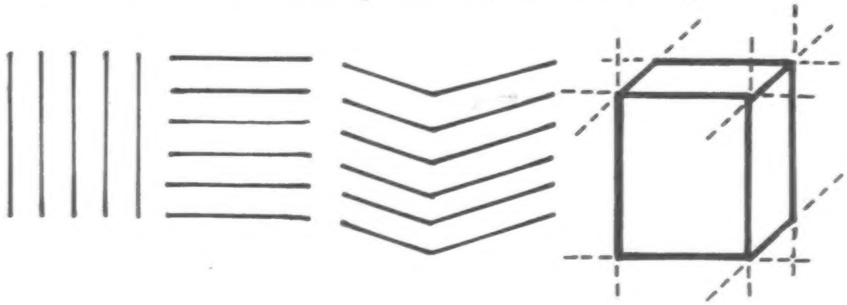


Three Dimensional Drawing...

Children enjoy making three dimensional objects. This illustration borrows from the Industrial Arts methods of cabinet drawing which makes use of parallel lines.

We can teach pupils to improve visual ability through this method. This should be taught when the children ask for assistance on how to show depth. One need not be too technical about perspective drawing as one can see they are not truly perspective in appearance.

You will note three sets of parallel lines are used. We refer to these lines as tracks; children understand this. Each box makes use of a vertical, a horizontal, and an uphill and downhill set of lines.



Practice making these lines, when one feels proficient one can add dimension to objects, toys, letters, and cars, trucks, furniture. They enjoy this achievement.

Let us analyze the illustrations starting at the top.

Fig. 1. We see front, right side, and bottom removed.

Fig. 2. We see front, right side removed, and bottom.

Fig. 3. We see front removed, right side, and bottom.

The center illustration shows plain, solid, square box.

Fig. 4. We see front, left side, and the top removed.

Fig. 5. We see front, left side removed, and the top.

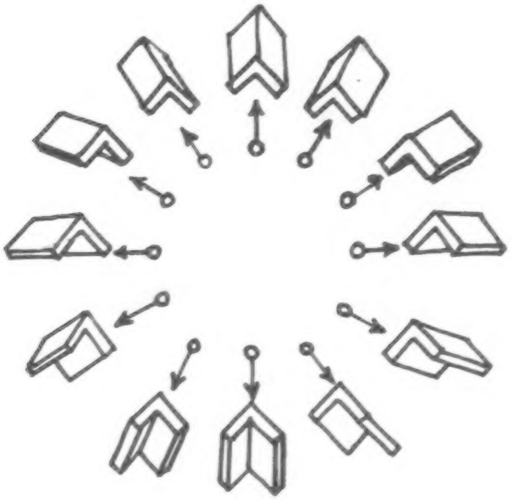
Fig. 6. We see front removed, left side, and the top.

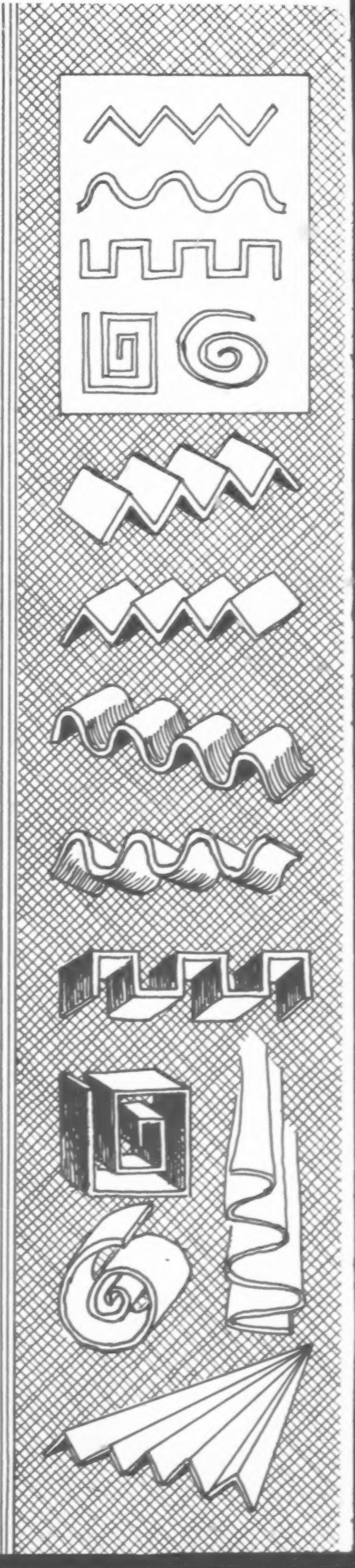
Make a large example of this sheet for your children. When this sheet is rotated, you see the same box combinations in different positions. Fascinates children.

Perspective drawing is easier to understand if child has an opportunity to use the track method first. We repeat, when the children ask how to show depth, using the cabinet drawing method has really helped them to understand. You will be amazed at their interest and accomplishments.

Dimensioning Line...

Any simple or complex line can be given dimension if a system of parallel lines is used. Using the clock as a guide, the dimensional line is drawn at the position of the clock number. Illustration at the right shows the angle of the dimension drawn at 10 o'clock and the drawing below using a 2 o'clock position. If one desires, they can use every position of the clock. Best use of the 12 and 6 o'clock position if line is at an angle. A different view of the line results if drawn in all positions. You can fascinate the children with a chart made using a line drawn dimensional. Try some yourself before showing these to youngsters.





Try a scribble line and give it dimensional quality.

Add thickness to a line, add the dimensional quality.

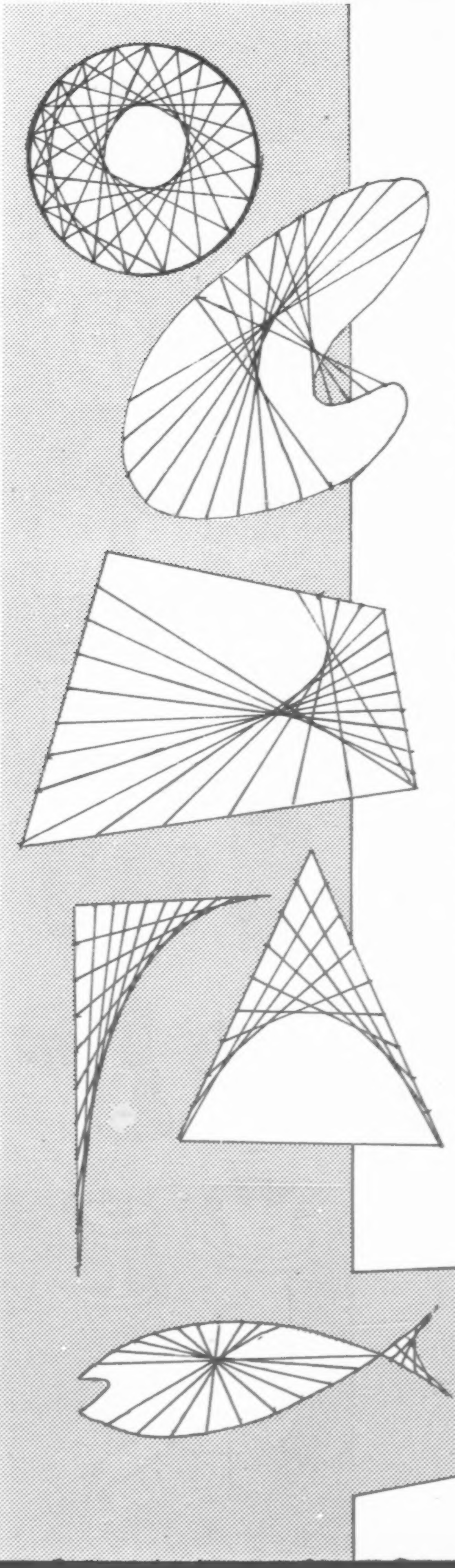
Notice how a wavy line can become drapery by adding a vertical dimension line to the drawing.

Spiral forms are additional incentive for the child who has a clear understanding. Quite challenging.

Many other lines or combinations of them can be the inspiration for further dimensional study. Letters, for example, can be given dimension by this method.

The illustration at the bottom of the page shows the principle of perspective which is the next logical step. Procedure develops spatial ability in student.

Parallel line principle is extremely important.



Line Generations...

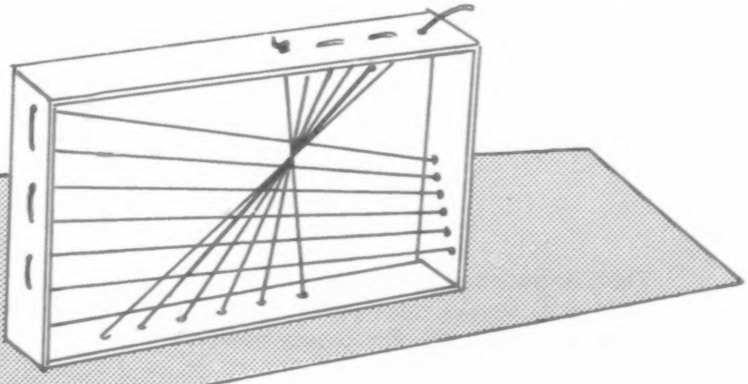
Generation of line with the aid of a ruler is an excellent process which develops the pupil's accuracy and attention to details.

Any shape or form may be used, space divisions may be equal or vary. The three dimensional is a result one can expect from pupil exploration. The circle uses the chord of four spaces, also one of eight spaces skipped. The circle is divided into 20 segments. You will note a 4 chord skip makes a smaller design as one goes around the circle and the 8 chord skip makes a design easier to work with.

Any shape or series of lines can be developed. Pupils like to use colored pencils or pens for this fascinating technique.

Resulting from pupil exploration, a possible use which may give you additional incentive to use this method is the filling in of spaces created with color schemes. Very colorful creations.

A fine type of activity for seat work. Student needs very little direction once the processes have been mastered. Three dimensional experiments can be accomplished with thread on cards or string and thread combinations on cardboard or wooden frames. These can become quite complicated for the upper level students and give them quite a challenge. Encourage experiments. These can also become the basis for tooth-pick sculpturing, which also seems to fascinate them. Perhaps you shall discover new solutions.



Object Drawing ...

Round objects can be successfully tried by children. Note the O is ovoid in shape and the C is really one half of the O. This approach seems to satisfy pupils when there is an urge to draw realistically without complicated explanations about perspective drawing.

Gradually, technical explanations clarify the whys to students. Make a list of appliances manufactured. The various catalogs available to students will supply a large majority of the items.

Powder boxes
Waffle irons
Mixing bowls
Round cakes
Microscopes
Candy boxes
Power tools

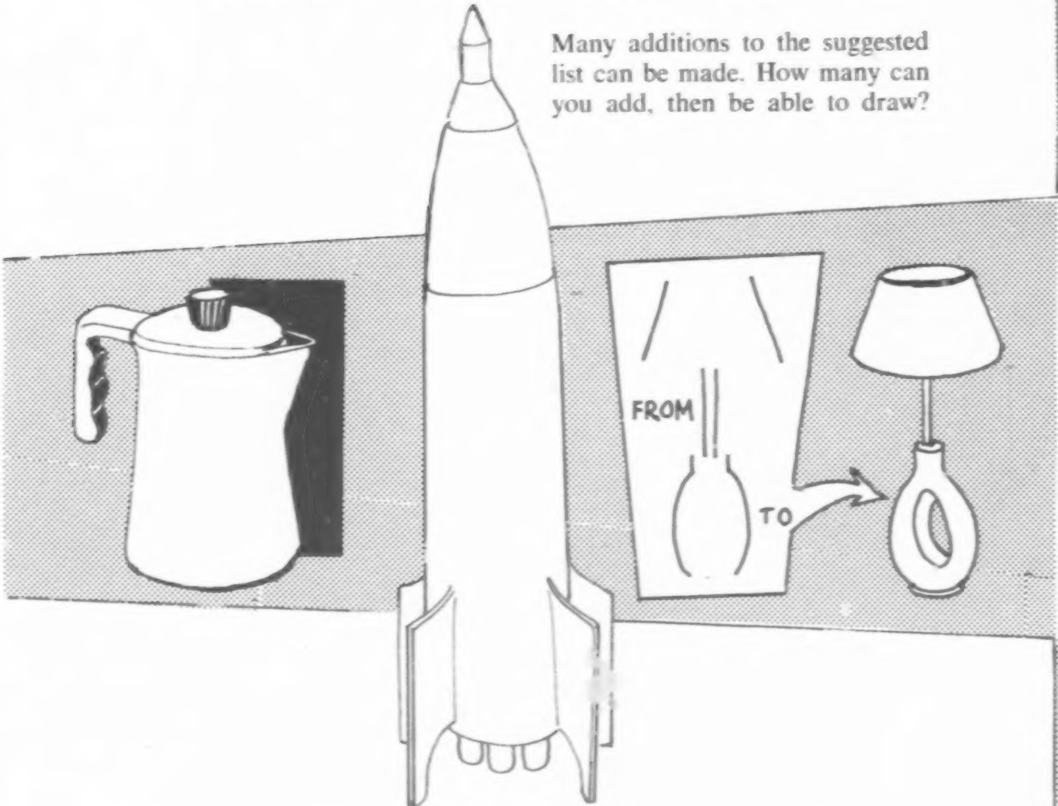
Bottles
Pitcher
Tea pot
Mirrors
Cameras
Shakers
Saucers

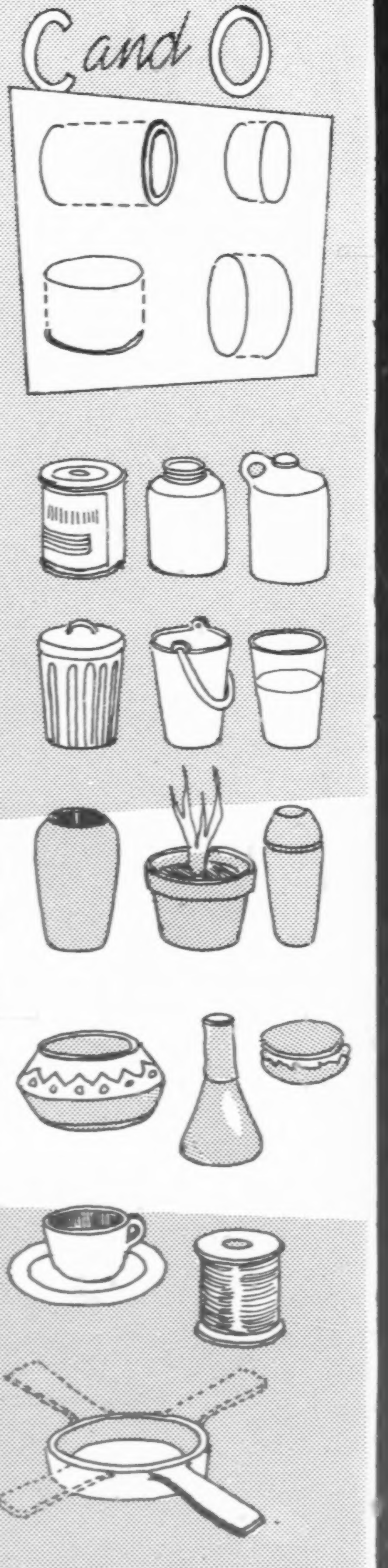
Plates
Motors
Dishes
Trucks
Trains
Spools
Cakes

Mixers
Clocks
Wagons
Cycles
Phones
Basket
Trays

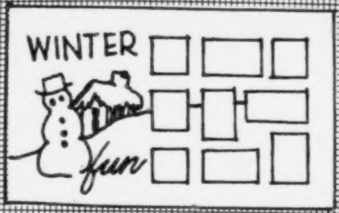
Tires
Lamps
Vases
Pipes
Rings
Tubes
Watch

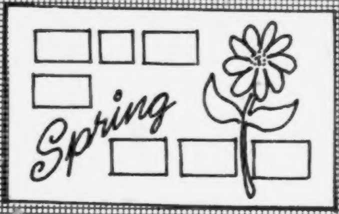
Many additions to the suggested list can be made. How many can you add, then be able to draw?

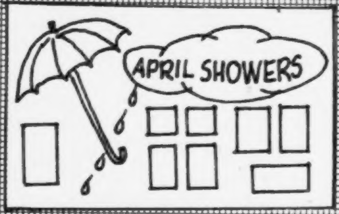


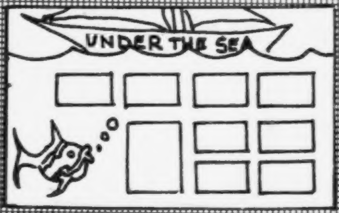


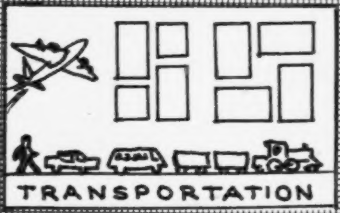
The illustrations shown are intended to prove that a large number of articles man makes can be drawn when children learn how to see the objects they observe.

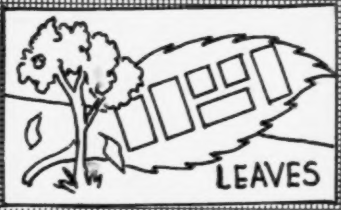


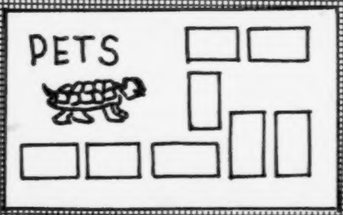












Bulletin Boards . . .

To help children communicate, we create a desire for them to improve arrangement and display of material. Some of the items you will need are as follows: pins, bulletin boards, mounting materials, colored tissue, corrugated paper, manila, construction, poster paper, adhesive, yarn, cloth, tape, tagboard, and scissors.

Children should select a theme, then collect pictures and discuss what to look for to make the arrangement attractive. Talk about the type of letters you need.

The bulletin board should be placed in a conspicuous location and preferably at eye-level of the student.

Pictures should be appropriate to the theme selected. Lettering made by the pupils should be uniform, easy to read, and simple to make. Colored background material must contrast with the letters and pictures. Simplicity should be uppermost in the pupils' minds.

The main illustration should be close to and perhaps a little above the center of interest. Pictures must lead the eye to the center of interest to assure the success of the arrangement. One should avoid crowded arrangements, and avoid monotony by varying the size of the illustrations. Small pictures can be grouped to balance a large illustration. Yarn adds a feeling of unity and helps to lead the eye of the observer.

Changing parts of the original arrangement will give all children a chance to have some of their examples on display at some time or another. Important — pupils feel their work accepted and appreciated by peers.

It is possible to correlate with other class subject matter when themes are selected and display material is gathered. A record should be kept by the teachers to insure that each child is included some time for a contribution to the overall display attempts.

Experiment with unusual methods of display. Remember, nothing ventured, nothing gained. If possible a photo record of the displays is always excellent.

Analysis of displays by the children, looking for the good and bad features and discussions as to how they may be improved will help them to gain appreciations and new insights regarding good bulletin boards.

Display Methods...

A zig-zag fold of cardboard taped to stand alone is easy to do and easy to transport. Both sides may be used and placed on a table by forming right angles. One of the simplest methods of display you can use.

Select similar sized boxes so that various combinations will enable you to make exhibit space for the three dimensional things. Taping the boxes together and cutting them a uniform depth, they will hold the items most schools will desire to exhibit.

A similar idea but using the wrap around principle. This requires that all boxes be exactly alike. They are taped together, trimmed, and decorated to suit.

Wall paper may be used to line the boxes. Pasting can be a little difficult. Place dioramas into them with painted or drawn backgrounds to fit.

Matting pictures seems to present some problems but the following are very simple procedures you could use to frame students' work. Give the pupil a chance to make these for himself. He needs to succeed.

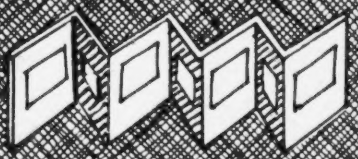
A pair of diagonal lines and folded as illustrated to any depth desired is a simple dimensional frame. The picture is pasted into the tabs of the box form.

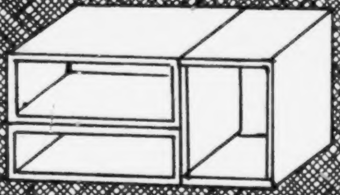
Cut an opening in a frame card and hinge it with another plain card and you have a simple, easy display unit to change pictures as needed. Make several to fit the sizes of paper you usually use.

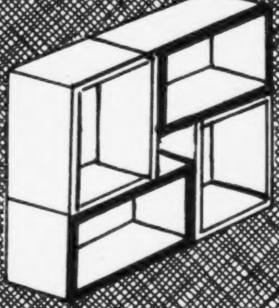
Have children place their picture on top of another sheet slightly larger than their picture. Center it visually and fold over extended edges around their picture. Pinch the corners to create a three dimensional quality. This is the quickest way for children to do their own framing of their work.

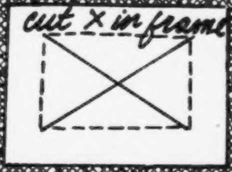
The bottom illustration shows another method. Form the box shape first and place over matted pictures. One must keep in mind that children must have opportunity to frame their own work and also be given a chance to evaluate their accomplishments.

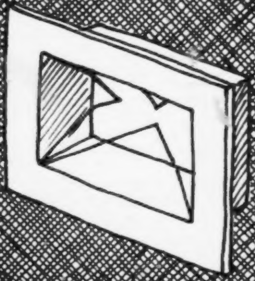
Many more examples are possible. Have pupils experiment with ways of display and if you try them yourself, progress in displaying will be achieved.

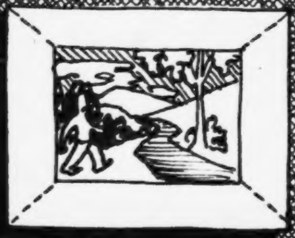


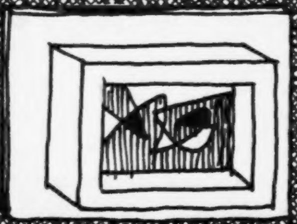


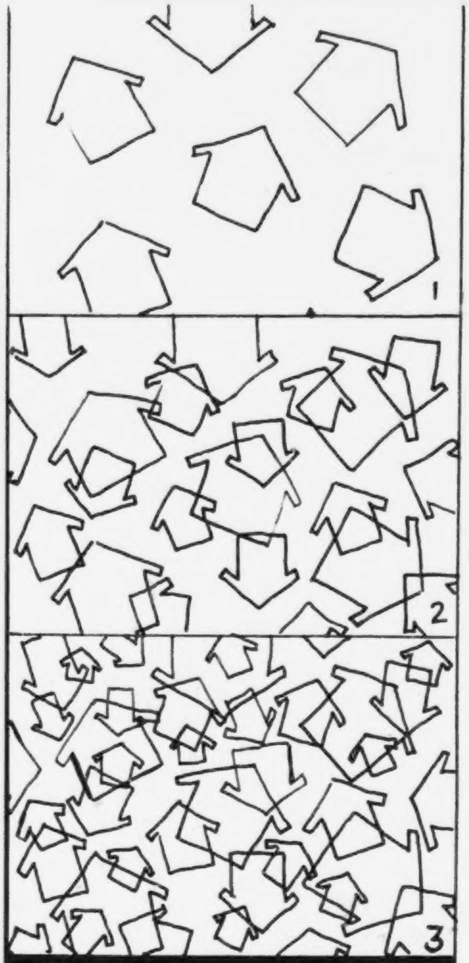












Shapes - Big · Middle · Tiny...

Discuss the selection of a theme. Work with familiar shapes and forms such as: fish, food, toys, tools, birds, figures, faces, masks, nails, sticks, paper clips, leaves, flowers, insects, bugs, sports equipment, animals, arrows, stars, ball, ring, watch, pipe, house, etc.

Stress big, middle size, and small — use the three bear story to emphasize this basic idea. Cut three sizes of a shape.

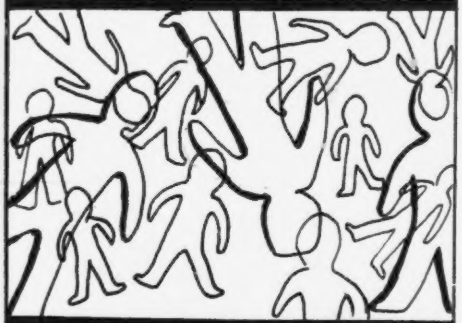
1. Shows large arrow or house placed at random on a sheet.
2. Shows middle size superimposed on the large shape.
3. Shows the tiny size overlapping to fill remaining space.

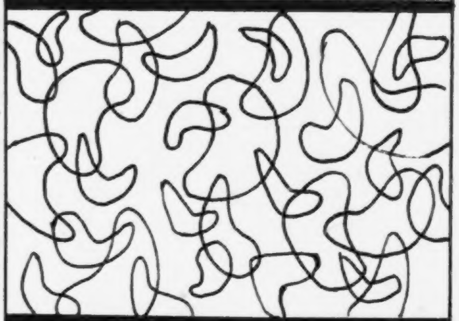
As youngsters mature they will not need cut out shapes. Some of the children are disturbed by the overlaps and will avoid them. Tell them it is to help tie the pieces together.

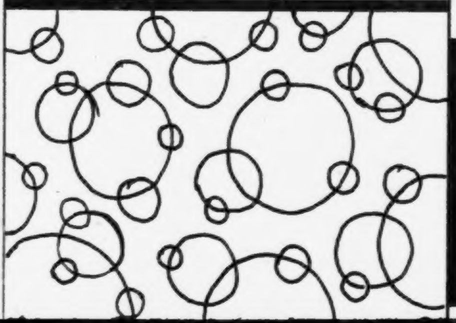
- When pieces have been placed the child may fill only the remaining background. Crayon, paint, or paper may be used.
- A dark piece of paper may be chosen with chalk and color darker than the paper. Use to create interesting effects.
- If chalk is used with crayon use the chalk first. Crayon works on top of chalk but not the other way around.
- Pen or crayon lines can continue around the formed shapes till no empty space remains. Have them pretend they are driving their colors around the shapes and they must not bump the existing shapes.
- Older pupils may select color schemes. A different color for each shape; where an overlap occurs they paint in the resulting mixture. Good for teaching color.

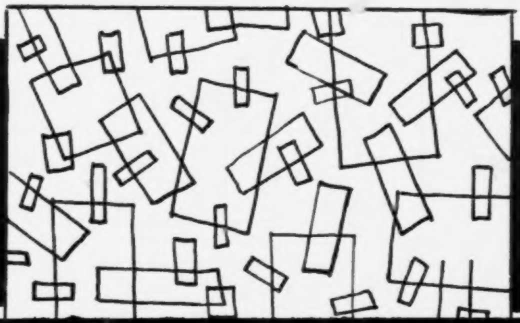
Children like bright colors and many times the colors remaining on shelves are shunned. Have them select a dull or drab color and use chalk with a color crayon darker than the paper selected. This will help get rid of unwanted colors.

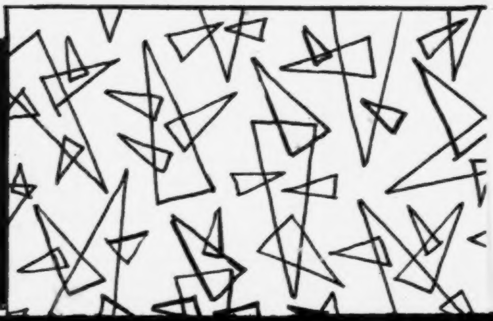
PAGE 67 2D LEFT POCKET











Continuous Line

Select a sheet of old, dark, dull, drab color which a child seldom uses and apply chalk and crayons. Use the continuous line method for excellent results.

Many of the colors to be selected fall into a neutral category. They do not appeal to children and it is an excellent way to use up the colors rejected by them.

A piece of chalkboard chalk can be used. Take an imaginary trip with a line or call it a follow the leader line. Test the crayons on the back of the sheet, which helps the pupil select the ones which adapt the best. Spaces created can then be filled. Color selection is either limited or unrestricted. Emphasize lights-dark.

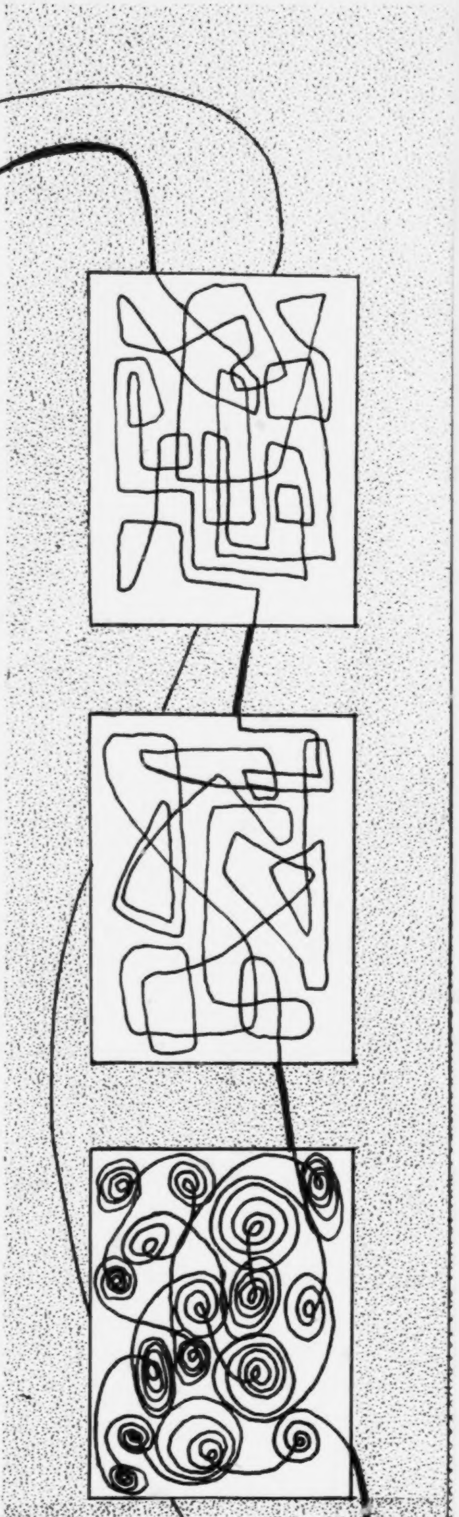
Dark colors tend to appear heavier, place these in the smaller spaces. Balance these with large areas of the light colors. Experimentation will aid the pupils to make decisions regarding the amount of color needed and the degree of variations possible.

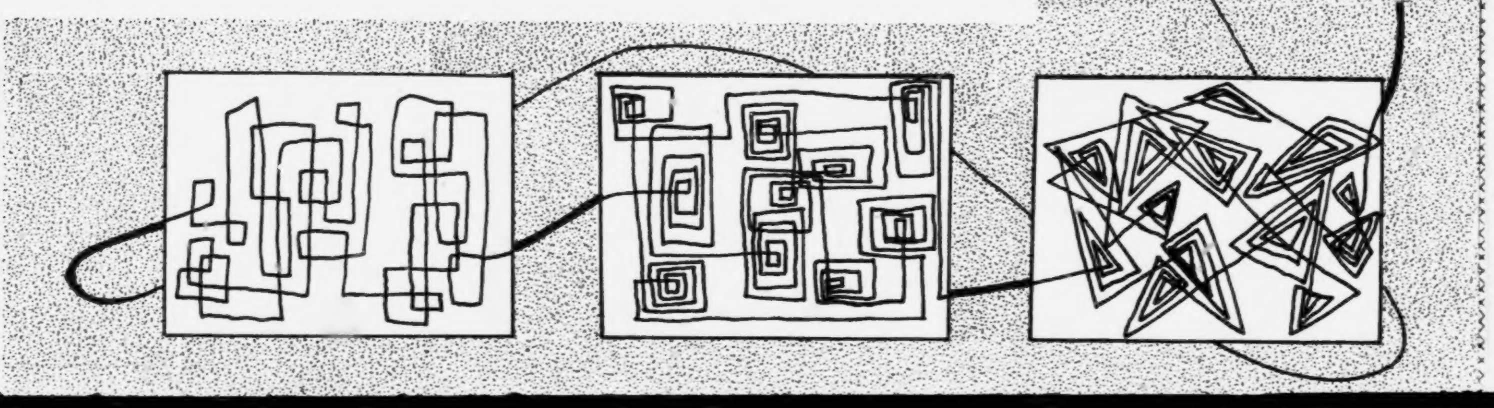
A simple way to make wrapping paper, wallpaper, drapery, cloth, counter tops, floor coverings, linoleum, and other commercial applications of design.

The old poster and the dull faded construction papers disappear from our shelves as if by magic. We strive to get the children to see that color is important to them and that any color of paper could be enhanced with the use of colored chalk and colored crayons.

The children began to see that beautiful designs were made from what normally was rejected. Pupils were the analysts and became more appreciative of their basic designs. The examples at right show the many possible variations that children can apply to their countless design explorations. They were happy with the results.

We called our completed designs "Personality Paper." The children agreed they were more cheerful, happier looking and made the dull colors selected come to life.





Landscape...

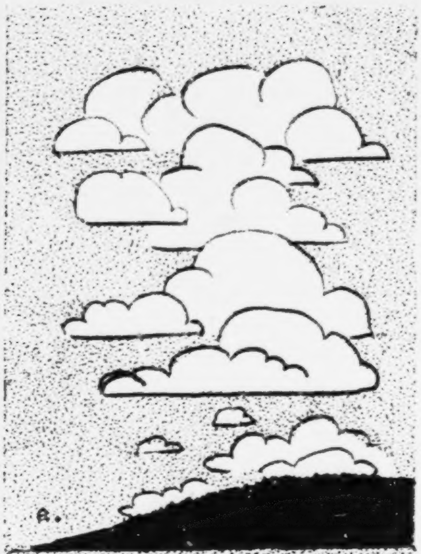
a. When drawing clouds, try to see the form within the formation, not just the outlines around them. Inside, the cloud bubbles and boils constantly. Notice also that cumulus-type clouds have flat bottoms that carry them with the wind. See how the clouds get smaller and smaller in the distance just barely showing on the horizon.

b. How does one make a lake stay down flat and not curve like a hill? The answer is in the far shoreline. Even though the lake seems round, be sure the shoreline is horizontal. Notice how reflections are vertical, but surface ripplings are curved. Water usually is blue, or if cloudy, gray.

c. A creek is different from a lake in its surface area, direction, and color. It must also have horizontal shorelines to keep it flat. Notice the shallow effect obtained by showing rocks. Tree shadows cross the creek, and water is usually brown or green, hardly ever blue unless exposed directly to the sky.

d. The chipmunks running on the rocks give "scale" to the picture — make the rocks seem small.

e. The same rocks look like cliffs with the covered wagons instead of the chipmunks..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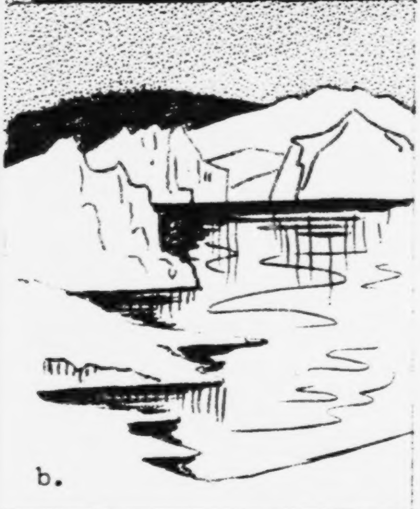
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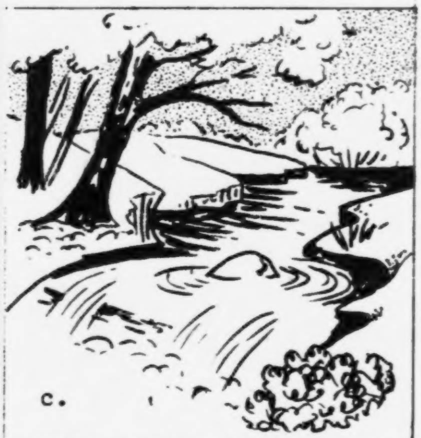
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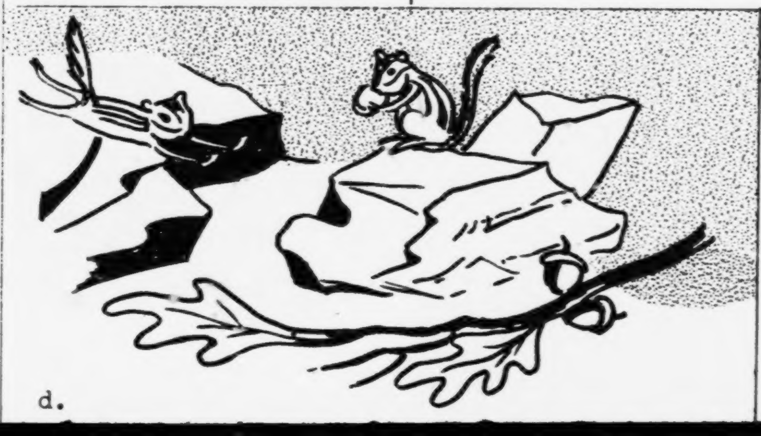
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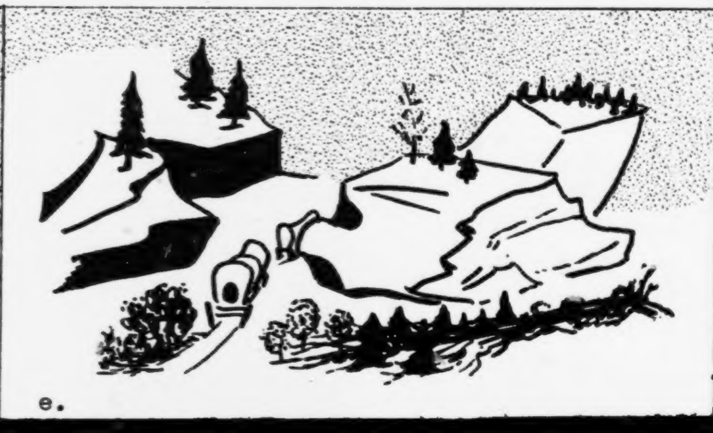
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Landscape Continued...

a. Pine trees are basically triangular in shape with a straight trunk. Branches have an upward sweep. Note that part of the tree trunk near the ground is mostly bare. A man can walk under the main branches upright.

b. Spruce trees are also triangular, but their branches come right down to the ground. Notice the difference in the smaller needles and cones. Branches sweep downward.

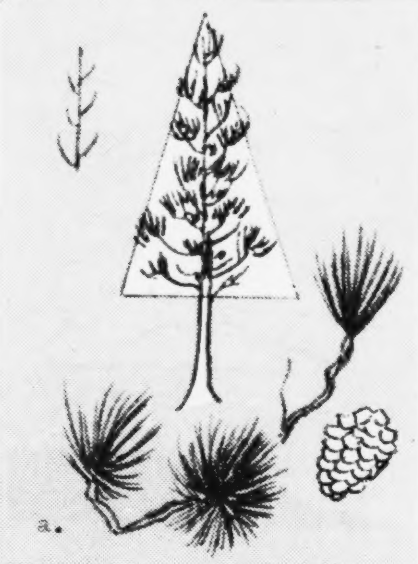
c. Deciduous trees have large sturdy trunks that divide into several main branches. Tips of branches become finer toward the ends. Trees are very tall. Let them go right off the paper and do not squeeze them into small spaces if you are trying for a natural effect.

d. When putting leaves on a tree, try to visualize the clumps of branches shading them underneath and highlighting them on top. Students should not attempt to show every leaf, just suggest them here and there.

1. Try drawing trees by starting the student actually "planting" the seed. Water it!

2. Let the sun help it grow.

3. Sprout the seed and bring strokes upward in a natural growth pattern. Do not stick branches into a tree. Keep strokes curvy for a graceful effect.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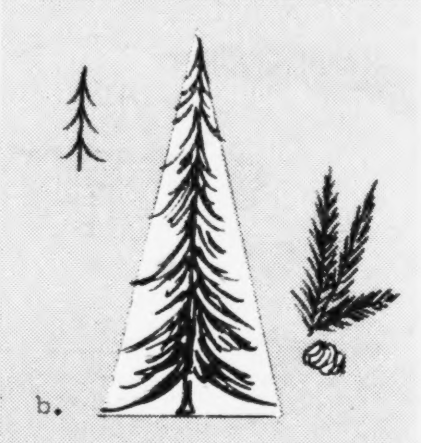
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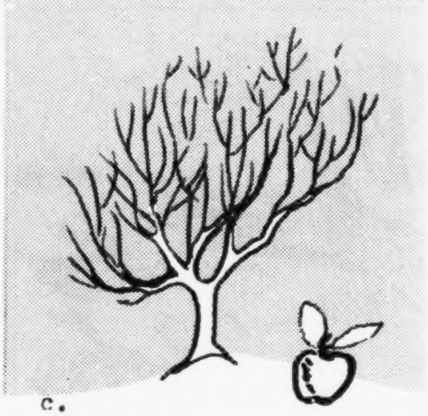
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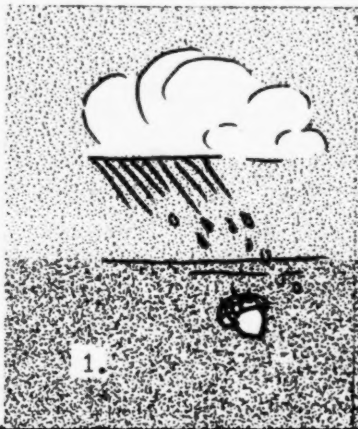
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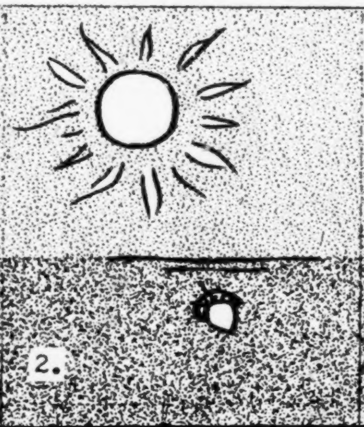
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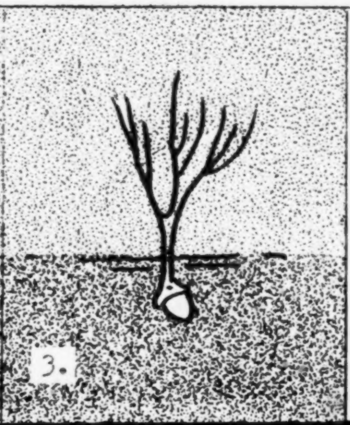
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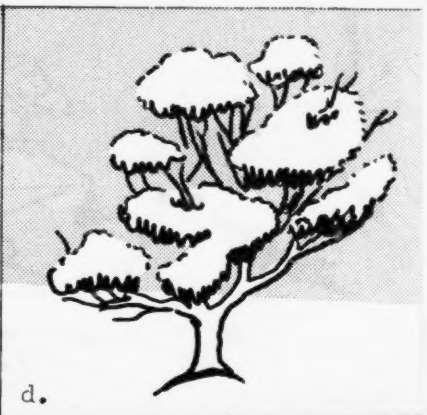
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Perspective . . .

There are many ways to show distance in a picture, to create the illusion that a two-dimensional paper opens up to let the eye travel for miles.

a. Small objects appear farther away than large objects.

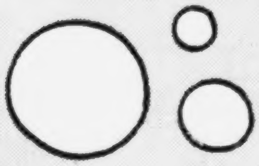
b. Overlapping planes make some shapes seem to be nearer than others.

c. Dividing a picture into 3 main areas: background, middleground, and foreground, we find that objects near top of paper are far away and those near bottom of page are close up.

d. Lines converging on a point will seem to travel into the distance. (Note the difference horizontal and vertical lines make in a railroad track or a fence.)

e. Warm colors advance, and cool colors recede. Also, bright colors advance but grayed colors recede.

f. Detail is clear on objects in foreground, while those in distance become less clear as they become smaller.



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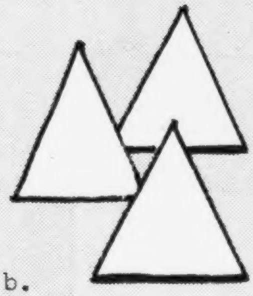

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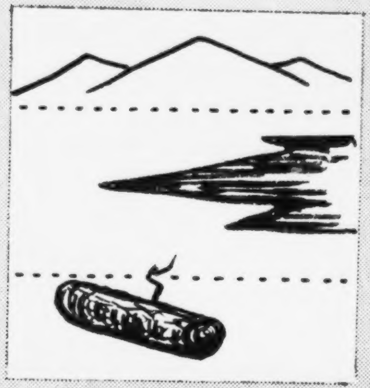

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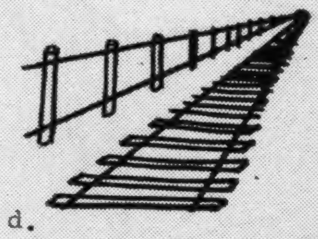

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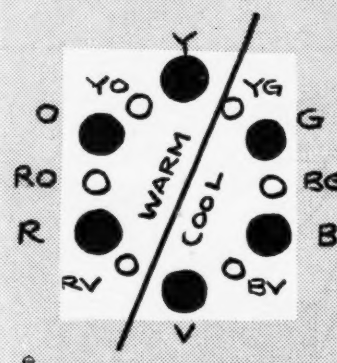

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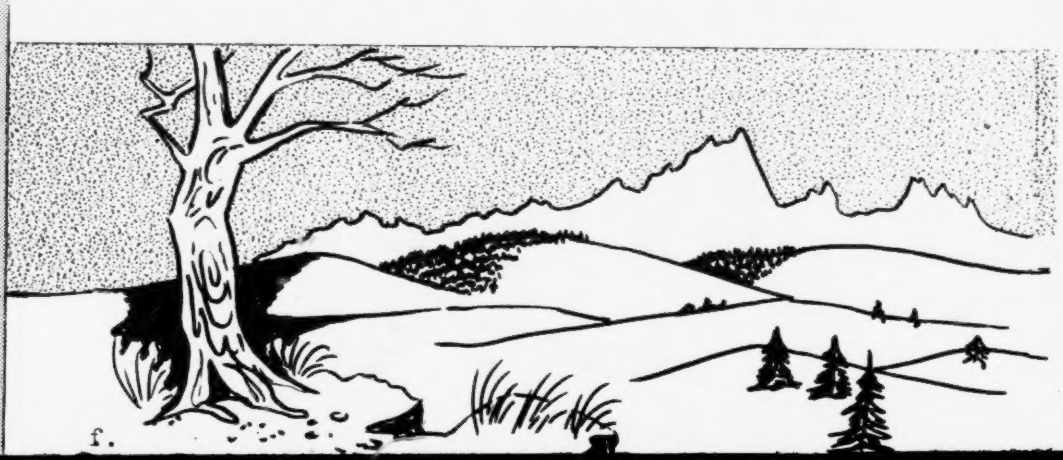

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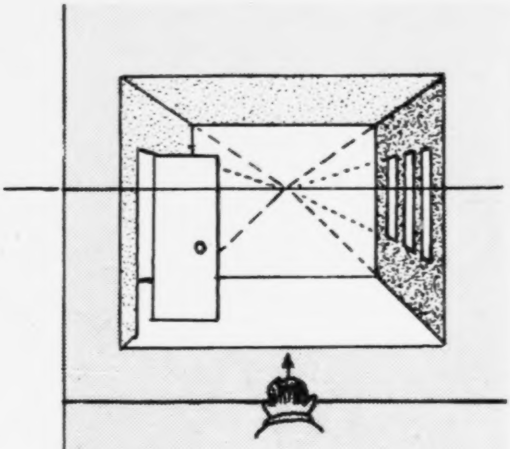


TWO POINT PERSPECTIVE

Building box at an angle directly at eye level. Note the dotted lines converge to point at left.

The box above eye level showing the bottom.

The same box below eye level showing the top.

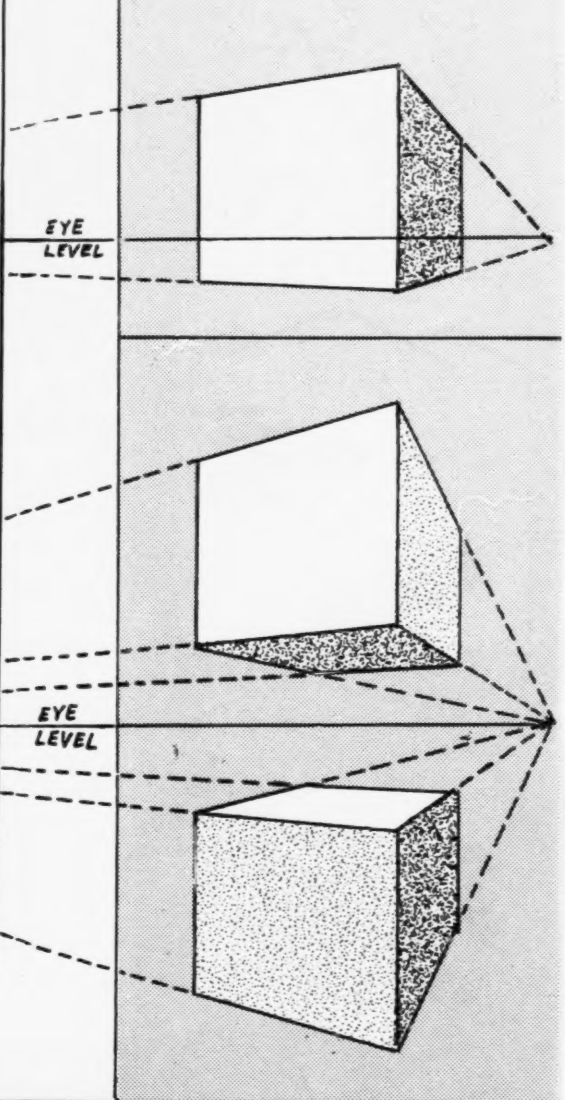
To get away from an extreme distortion note one of the vanishing points is off the drawing area. Extreme distortion usually occurs when both points are on the drawing area.

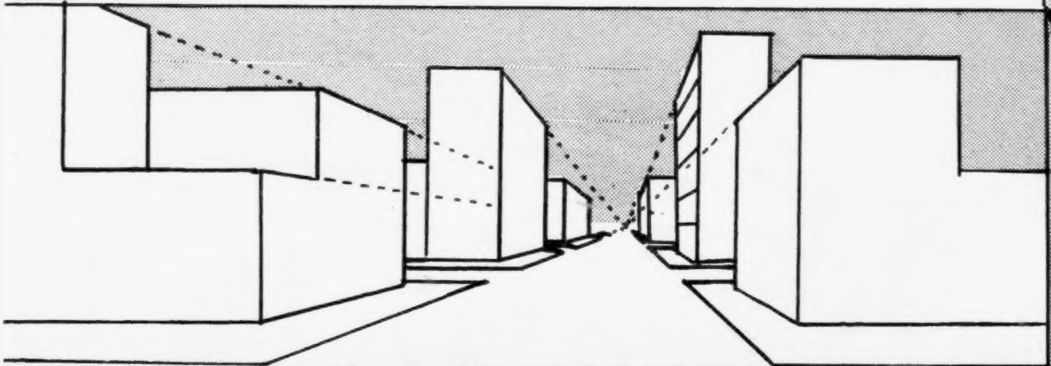
ONE POINT PERSPECTIVE

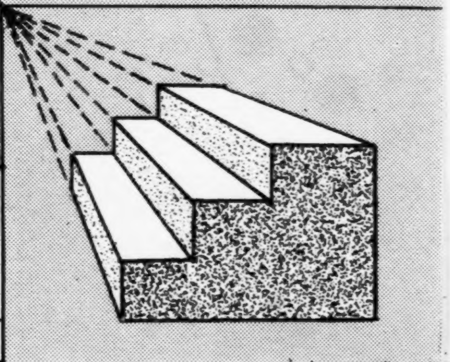
Illustration at top right shows the inside of a box with observer at right angle to the view.

Stairs shown (bottom right) with converging lines all going to one vanishing point. Note the horizontal and vertical lines are parallel to the picture plane.

A downtown street with all converging lines going to one vanishing point. If the observer were on a hill his eye level would be higher and it would be possible to see the roof tops of some of the buildings.







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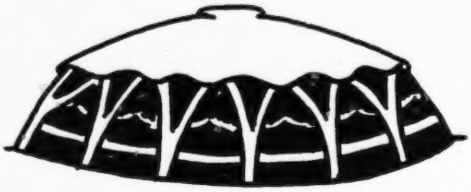

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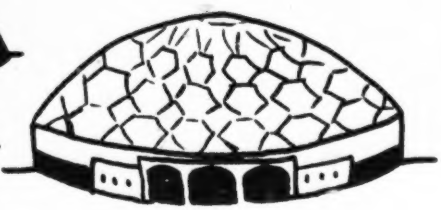


Architecture...

The history of architecture from early times is easy to find in books, but the architecture of today is so new that few books are yet available. Our children need to be stimulated to project their imaginations into the future where they will be living.

All of the buildings on this page are actually built and are being used today.

a. Theater at Fort Worth in Texas by R. B. Fuller

b. Olympic Sports Palace in Rome by Pier Luigi Nervi

c. Cafe in Mexico by Candela

d. Philips Pavilion at Brussels Fair by Le Corbusier

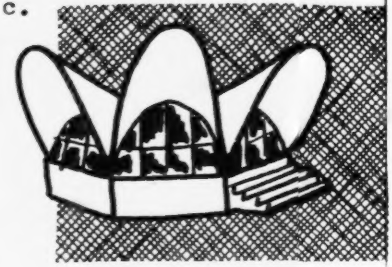
e. Beach House in New York by Andrew Geller

f. Ronchamp Chapel in France by Le Corbusier

g. Home in Jacksonville, Florida by Paul Rudolph

h. TWA Terminal at Kennedy Airport by Saarinen

c.



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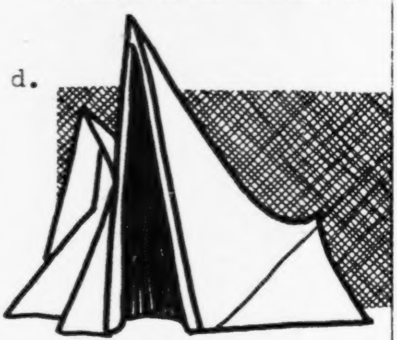

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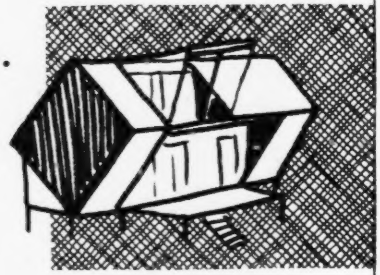

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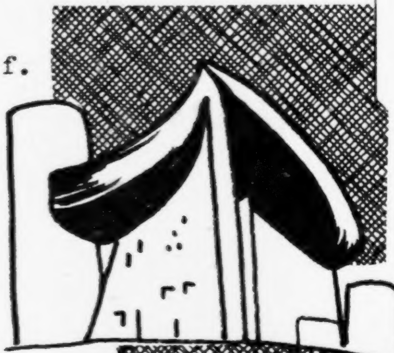
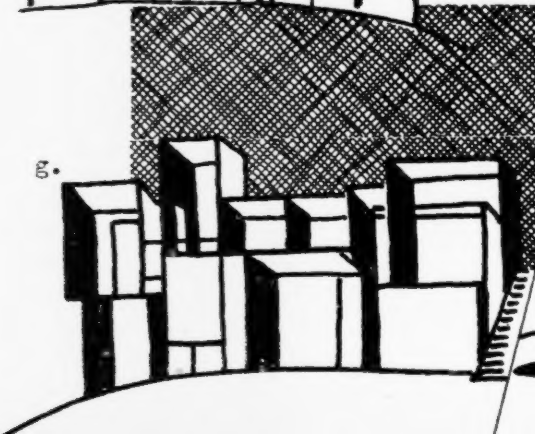
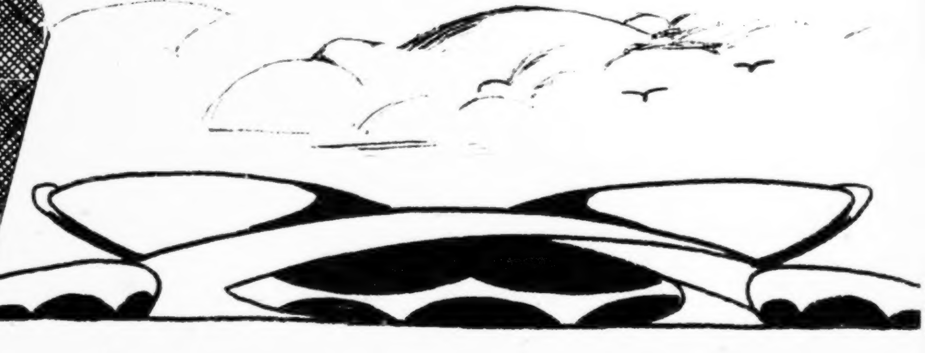


g.





h.

PAGE 73 2D LEFT POCKET